

ELECTRONIC SWITCHING SYSTEM NO. 3  
OFFICE DATA TABLES LAYOUT SPECIFICATION  
FOR OFFICES EQUIPPED WITH THE 363  
GENERIC PROGRAM

A. T. & T. CO. RATING  
SPCS

N. E. CC. RATING  
SPCS

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## ISSUE NOTES

ISSUE -----	CHANGE CLASS -----	APPROVAL -----		DESCRIPTION OF CHANGE -----
		ENGR	DATE	
1	-	DSA (7127)	11-1-79	Original Issue (including LDI's 1 to 5)
2	A	JBW (7414)	2-1-80	Additional changes per LDI 5 (on pg. 200-10, valid expansion entries for 2-pty lines added; on pg. 600-6, note for CCTBL corrected; on pg. 800-9, TLUID layout corrected). Other miscellaneous changes.
3	A	JBW (7414)	8-1-80	Additional changes per LDI 6. Editorial corrections to (sections 100, 200, 300, 500, 600, 700 & 800). Design change to section 700. Add ANATID new identifier for ANARC. Add bit NW_ANA to OFF_DATA.

## SECTION INDEX

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## GENERAL NOTES

1. MAIN STORE LAYOUT - The following figure shows the layout of MAIN STORE in a No. 3 ESS office equipped with the 313 Generic.

ADDRESS	SIZE (K-10241)
01	GENERIC
40961	PROGRAM STORE 3K (4096)
296961	GENERIC ASSIGNED TEMPORARY STORE
368641	TRANSLATION ASSIGNABLE TEMPORARY STORE (7168)
1392641	GENERIC
262143	PROGRAM STORE 100K (102400)
	313
	TRANSLATION STORE
	VARIABLE DATA
	120K MAX. (122880)

## GENERAL NOTES (continued)

2. TAPE LAYOUTS - Tape layouts describing the "TRANSLATION" file and REMAPES" file are controlled by J3H001T-1. The ODA must produce these two files.
3. SIZE OF 3E3 TRANSLATIONS - The maximum size of translations is 122,880-1 words, which is a tape limit. The number of spare words in the "SFARIS" MTL plus the number of words used in translations cannot exceed the 122,880 -1 limit (120K = 122880). See also Figure 1, Note 10 and Figure 31D, Note 3.
4. ORDER OF ODA PROCESSING - The use of the ICS bit in OFF\_DATA (Fig. 23A) to determine the default condition in Speed Call change (Fig. 2C, Note 4, bits CH1 & CH2, and Fig. 2C, Note 9) requires that OFF\_DATA be established by the ODA before line data is processed; e.g., ESS 3500 forms must be processed before ESS forms 3100, 3105 or 3107 forms.
5. In this document, all numbers are given in decimal, unless otherwise qualified. The suffix K equals 1024 (as in 136K = 139,264).
6. In this document, whenever a BCD 0 is to be stored, it is stored as a binary 1010.

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SECTION 100

NASIS TABLE INDEX

INDEX OF FIGURES

Figure 1 - MTI (Alphabetical, Sequential)

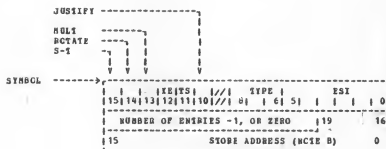
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FIG. 1 MASTER TABLE INDEX (MTI)

TYPES OF MTI ENTRIES:



ESI = Entry Size Indicator (see MULTI below).

JUSTIFY = Used when ROTATE = 1.  
 = 0 Do not right justify the entry.  
 = 1 Right justify the entry.

MULT = 0 If ROTATE = 0, then ESI =  $\log_2$  (no. of words per entry).  
 If ROTATE = 1, then ESI =  $\log_2$  (no. of entries per word).  
 = 1 MULTIPLY - ESI = no. of words per table entry - 2.

ROTATE See MULTI above.

S-1 = 0 Translation Table - ESI = (see MULTI above).  
 = 1 Search Table - ESI = no. of words per table entry.

TYPE = Type of translation table. If there is only one type, TYPE = 1.

TS = 0 Address points to program store.  
 = 1 Address points to temporary store.

XE = 0 Translator is not defined.  
 = 1 translator exists.

"NO. OF ENTRIES" = Number of entries - 1, if XE=1  
 ENTRIES = zero, if XE=0



FIG. 1 (continued) - NAME TABLE INDEX (HTI)

## ALPHABETICAL LIST OF THE HTI:

TRANSLATOR NAME	SITE (WORKS)	STARTING LOCATION	SECT-FIG	NOTE
ALITWD	1	420075	700-25	
ARA_PDF	3	421124	700-24	
ARATID	2	421100	700-23D	
ARIEXP	3	421402	600-18A	
BOSCAN	1	420101	800-35A	
CALLBACK	3	421344	700-28B	
CCTBL	3	421333	600-16B	
CDIEXP	3	421371	600-16A	
CFLST	3	421322	300-8B	
CFTDL	3	421127	300-8A	
CHARGEGB	16	420102	600-19	
CKTSCAN	258	420122	800-34	3
CLSRV	8	420524	800-33A	
COULST	3	421325	800-11B	
CCINSTAT	3	421132	300-9B	
COINTRIP	3	421405	300-9A	
CP_F28	1	420534	800-35F	
CUTSTAT	3	421341	700-27	
DSIBLK	7	420535	800-33C	
DIDACTA	1	420544	700-23J	11
EIOCHAN	3	420000	800-29B	2, 11
EQRISNCE	1	420074	800-29C	
EQPT_PC	32	420545	800-35E	
EXPIBL	3	421440	400-11A	
FATTBL	12	421355	600-16	
FETL	2	421073	700-23H	
GRPSTAT	12	421140	500-13	
GRPIBL	12	421410	500-12A	
IDLK	3	420605	800-33B	
INTCHG	1	420610	600-19A	
LHPATBL	4	420611	700-22B	
LCT_DATE	1	420076	700-26A	
LCCBL	3	421336	700-21	
LOG_SCAN	1	420615	800-35B	
LSITSWRD	2	420011	800-31A	2

FIG. 1 (continued) - MASTER TABLE INDEX (MTI)

## ALPHABETICAL LIST OF THE MTI:

TRANSLATOR NAME	SIZE (WORDS)	STARTING LOCATION	SICR-FIG.	NOTE
HEHLST	12	421424	500-15	
HASTYPE (SPARE)	1	420616	800-35H	
HSTBL	3	421132	300-7	
HSGCL	46	420617	700-28A	
HT_FEB	1	420677	800-35G	
NETWEQPT	1	420780	800-35C	
NETWMT	1	420781	800-35D	
NOCBCD	8	420702	700-22A	
NODD	24	421451	400-10A	
NCTEST	4	421066	700-23G	
NPAPAT	4	420712	700-22C	12
OFFICE	6	420721	700-23B	
OFF_DATA	3	420716	700-23A	
OIEEP	16	420731	700-2E	
RIEIP	3	421377	600-18	
SEILIBL	3	421330	200-2D	
SCHEDINH	16	420751	700-26D	11
SCBSIZI	1	420771	700-23B	
SC1LST	2	421314	300-5	
SC2LST	3	421317	300-6	
SCIBLS	3	421374	600-17	
SKYDOLK	15	420772	800-33E	
SPARES	3	421633	800-31D	7
SPDATA	18	421102	---	6
SPTBL	3	421443	200-2	
SPINPATI	90	421157	---	6
SEFLANTI	90	421501	---	6
STRLIN	(2)	421637	600-31B	5
STRLST	3	421636	800-31B	5
SVC_RATL	1	420077	700-26B	
SVCTBL	3	421446	200-4	4
SV_TBL	(2)	421447	200-4	4
TAPROPTS	1	420003	800-30A	

FIG. 1 (continued) - MASTER TABLE INDEX (MTI)

## ALPHABETICAL LIST OF THE MTI:

<u>TRANSLATOR NAME</u>	<u>SIZE JSCRS1</u>	<u>STARTING LOCATION</u>	<u>SECT-FIG</u>	<u>NOTE</u>
TAPEQUE	1	420004	800-308	2
TAPEQUC	1	420005	800-30C	2
TAPETBL	3	420006	800-30D	2
TLTBL	2	421064	700-23F	
TLUID	16	421044	800-33D	
TOTANTBL	3	421347	500-12E	
TRAFD	27	421011	800-33F	
TRK RATE	1	420100	700-26C	
TRKSCAN	(192)	420224	800-34	3
TSFAPZ	3	421311	800-31C	7
TUTTL	1	421072	700-231	
TTCPBS	33	420033	800-29A	
WEECN	3	421075	700-23C	
WETBL	16	420013	800-32	
1EGTBL	3	421352	600-20	2
3PCSTAI	3	421154	500-14	

FIG. 1 (continued) - MASTER TABLE INDEX (MTI)

SEQUENTIAL MEMORY LAYOUT OF THE MTI: (NOTE 1)

STARTING LOCATION	TRANSLATOR NAME	SIZE (WORDS)	NOTE
420000	EQIOCHAN	3	2,11
420003	TAPECFIS	1	2
420004	TAFIOUI	1	2
420005	TAFIOUC	1	2
420006	TAFIETI	3	2
420011	LSIISARD	2	2
420013	WFIEL	16	2
420033	TICPDS	33	
420074	FGNISPCD	1	
420075	ALITWEL	1	
420076	JCT_RATE	1	
420077	SVC_RATE	1	
420100	TFR_RATE	1	
420101	BCSCAL	1	
420102	CHANGITE	16	
420122	CKISCAV	250	3
420224	TRKSCAV	(192)	3
420524	CLSBV	8	
420534	CP_FEE	1	
420535	ESTBLR	7	
420544	ETDACTA	1	11
420545	ICTT_IC	32	
420605	ISLK	3	
420610	IKTCHG	1	
420611	LBTATIL	4	
420615	LCG_SCAN	1	
420616	NACTIFE (SPACE)	1	
420617	NSGCI	40	
420677	MT_FEE	1	
420700	RTIMEPT	1	
420701	NEIWR	1	
420702	NCCBCE	8	

CONTAINS  
DATA

FIG. 1 (continued) - MASTER TABLE INDEX (MTI)  
 SEQUENTIAL REPORT LAYOUT OF THE MTI:

STARTING LOCATION	TRANSLATOR NAME	SIZE (WORDS)	CODE	
420712	HEAFAT	4	12	CONTAINS DATA
420716	OFF_DATA	3		
420721	CTFIC	8		
420731	CIESE	16		
420751	SCHECINH	16	11	
420771	SCBSIZE	1		CONTAINS DATA
420772	SFECDIR	15		
421011	TEAFE	27		
421044	ILUD	16		
421064	ILTPL	2		
421066	NCIEST	4		CONTAINS TEMPORARY STORE ADDRESSES
421072	TCIT1	1		
421073	FTIL	2		
421075	WPCB	3		
421100	AEHIE	2		
421102	SEDATA	18	6	
421124	ANL_FUP	3		CONTAINS TEMPORARY STORE ADDRESSES
421127	CEIOL	3		
421132	MEIOL	3		
421135	CCINSTAT	3		
421140	GFFSTAT	12		
421154	3ECSTAT	3		CONTAINS PROGRAM STORE ADDRESSES
421157	SEINFAT	90	6	
421311	TEPAHE	3	7	
421314	SC1LS1	3		
421317	SC2LS1	3		
421322	CF1S1	3		CONTAINS PROGRAM STORE ADDRESSES
421325	CC1LS1	3		
421330	SEILTEL	3		
421333	CCITOL	3		
421336	LCCTEL	3		
421341	CTSTAT	3		CONTAINS PROGRAM STORE ADDRESSES
421344	CALLBACK	3		
421347	TCIATNOL	3		
421352	ILCTEL	3		
421355	YATTEL	12		
421371	CDIESE	3		CONTAINS PROGRAM STORE ADDRESSES
421374	SC1BL5	3		

SEQUENTIAL MEMORY LAYOUT OF THE M11:

STARTING LOCATION	TRANSLATION NAME	SIZE (WORDS)	NOTE
421377	SIHX	3	
421402	ADTIP	3	
421405	CCINTIP	3	
421410	GRPTL	12	
421424	RPHLS1	12	
421440	RYPTL	3	
421443	SFPHL	3	
421446	SVCTPL	3	
421447	SV TEL	(2)	
421451	KCCD	24	
421501	SFILAMT1	90	
421633	SFASIS	3	
421636	STRLPT	3	
421637	STRLM	(2)	

FIG. 1 (continued) - MASTER TABLE INDEX (MTI)

## NOTES:

1. The Master Table Index (MTI) is a fixed area of program store which contains or provides linkage to the various parameters and translation data for the generic program. This area is used for the MTI entries listed or reserved for future MTI entries. This area may not be used for any other purpose.
2. These data words are generic defined and are not changeable through the recent change programs.
3. KETSCAN includes the 192 words for TERSCAN.
4. The 3 words for SVCTBL includes the 2 words for SV\_TBL.
5. The 3 words for STRLST includes the 2 words for STRLIN.
6. There are 20 spare words of data, 30 spare 3 word MTI entries for temporary store and 30 spare 3 word MTI entries for translation store.
7. There are two 3 word MTI entries, (one for temporary store and one for translation store) giving the number of spare words in each store in the first word.
8. Twenty bits are required to address a word in Program store (PS) or Temporary Store (TS). Bits 0-3 of word 1 in the MTI entry are concatenated in front of word 2 to form the 20 bits of the store address. The address may not be 0. If the translator does not exist (XE=0), the address must point to where it would have pointed if the translator did exist (i.e., it points to the same location as the next existing MTI entry).



9. To satisfy "REALLOCATION" requirements, see Figure 1A.
  10. The MTI must start on a 4K boundary. For JE3, the MTI starts at 136K (octal 420,000). The last word of TRANSLATION store is the last word of PHYSICAL store, or 256K-1 (octal 777777), whichever is less. See also Figure 31D and Section 000, Note 3.
- (continued)

## FIG. 1 (continued) - MASTER TABLE INDEX (MTI)

## NOTES: (continued)

11. Data words are not Recent Changeable for 383. The data is inputted or changed by a translation overwrite.
12. Data used by Office Records only. Inputted by ODA or Recent Change.

## FIGURE 1A - STORE ORGANIZATION

## 1. Translation Store Organization

## A. General

Translation store consists of the Master Table Index (MTI), followed by variable length data tables pointed to by the MTI. The MTI is at a fixed location, and is of fixed length, for all offices or a given generic. The variable data tables (both quantity and size) depend on the data required by an individual office. Several different data structures can exist in 10. 3 ESS. These are shown in Figure 1B.

The MTI contains either data (as in A and B), address pointers to Temporary Store (TS) (as in C), or address pointers to Program Store (PS) translators (as in D, E, F, and G). A PS translator may be either:

1. Data (as in H).
2. Vacant (as in I).
3. A head table containing PS increments to subtranslator(s) which contain the data (as in J, K, and L).
4. A head table containing PS increments pointing to subtranslator(s) which contain PS increments to sub-subtranslator(s). I is a head table with increments pointing to subtranslator N (with sub-subtranslators M and C) and to subtranslator P (with sub-subtranslators Q and S).

The lowest level subtranslator at any point always contains only data while higher level subtranslators contain PS increments and possibly some minor amounts of data.

B. Allocation Rules

To allow for proper reallocation, the rules for allocation of translators are as follows:

1. The MTI is organized with all data entries first, followed by all TS pointer entries, followed by all PS (translator) pointer entries.



## FIGURE 1A (continued)

2. Complete translators (as defined above) must be allocated in store in the same order as the MTI entries, beginning after the last MTI entry. All use of PS translation store must be contiguous.
3. Once allocation of a translator is started, it must be completed before another translator may be started. For example, B must precede I and all its subtranslators. Refer to Figures 18 and 19.
4. All PS address pointers in the MTI must be nonzero. If the translator does not exist, (i.e.,  $XE=0$  in the MTI format), the address pointer must point to the location where the next existing (i.e.,  $XE=1$ ) translator resides (as in H).
5. Within a translator consisting of a head table and subtranslator(s), the PS increments in the head table must occur in increasing order, i.e., within a head table the second PS increment encountered must be larger than the first PS increment encountered, etc. This says that subtranslators must occur in the order in which they are referenced in the head table. For example, for translator G, the order must be L, N, M, C, E, G, and R.
6. Logically extending rule 5 to the case of sub-subtranslators pointed to by subtranslators yields the case that all sub-subtranslators of a subtranslator be allocated before the next subtranslator is allocated.

The above rules yield the following general rule:

As you progress through the MTI, all PS addresses encountered must be nonzero and be larger than the previous address encountered; and as you progress through the remaining translators, once a head table, subtranslator, or sub-subtranslator is started, all other translators at a lower level must be finished before moving on to another translator at that same level (see Figure 1C).

#### C. NOCD Translator

The only specific case of rule 6 above is the NOCD (8-digit) translator. A specific rule covering this translator follows:

Each Number Group Table (NGT) is followed by the first assigned Thousands Group Table (TGT). Each TGT is followed by the Hundreds Group Tables (HGT), usually of 10 tables, associated with that TGT. After the HGT, the next assigned TGT follows with its associated (NGT). After the TG tables for the NGT, the next NGT follows with its TG and HG table.

## FIGURE 1A (continued)

D. Number List Indexes

The number list indexes must be in increasing order with respect to increasing group number for each group MTI. For unassigned groups the number list index must point to where the number list would start if the group existed, i.e., it points to the same PS location as the next assigned group.

2. Temporary Store OrganizationA. General

The TS pointed to by the MTI is an ODA assignable based on input data from ESS 3111 format. To allow proper reallocation, the rules for allocation of TS are as follows:

1. All MTI pointers to temporary store must point to increasing TS address in the same order as the MTI entries are ordered. All use of TS translation store must be contiguous.
2. All TS address pointers in the MTI must be nonzero. If the TS area does not exist (i.e., YE=0 in the MTI format), the address pointer must point to the TS location where the next existing ODA assignable TS resides.

B. Selection Status Block Indexes

The selection status block indexes must be in increasing order with respect to increasing group number for each group MTI. For unassigned groups the selection status block index must point to where the selection status block would start if the group existed, i.e., it points to the same TS location as the next assigned group.

FIGURE 18 - TRANSLATION STRUCTURE TYPES

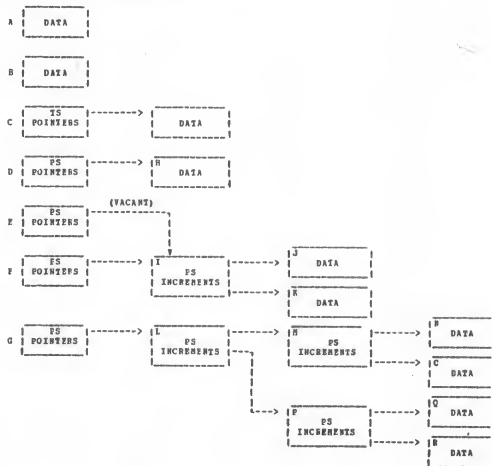
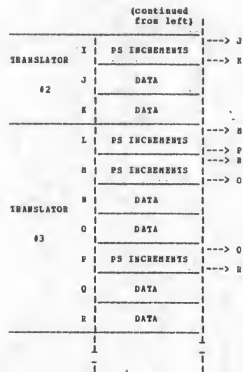
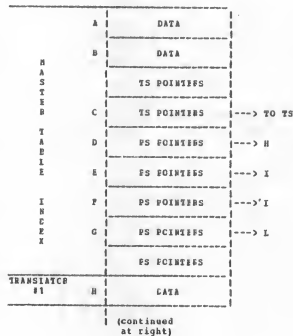


FIGURE 1C - TRANSLATION ORGANIZATION



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SECTION 200

SCAN POINT TRANSLATIONS

INDEX OF FIGURES

- Figure 2 - Scan Point Number Translation - Subtranslators  
Special Billing Table for WATS  
Office Index Expansion  
Figure 3 - (Unused)  
Figure 4 - SFN Translation - Service Circuit Table

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FIG. 2 (continued) - SCAN POINT NUMBER TRANSLATION

## NOTES:

1. The LINE and UNIVERSAL Subtranslators consist of 2-word entries. The MISC Subtranslator consists of 1-word entries.
2.  $T=1$  for MISC Subtranslator.  
 $T=2+1$  for LINE and UNIVERSAL Subtranslators.
3. SUB\_TYP (Subtranslator Type) identifies the type of subtranslator which is being addressed.  
SUB\_TYP = 0 Unassigned subtranslator  
          = 1 Miscellaneous subtranslator  
          = 2 Universal subtranslator  
          = 3 Line subtranslator
4. Words 4-6 in the SPN HEAD Table point only to MISC Subtranslator. Words 14,22,30,38,... in the SPN HEAD Table are associated with junctions which are not translated in this table and therefore are unassigned if they are allocated. All other words in the SPN Head Table point to either a LINE or UNIVERSAL Subtranslator.
5. There may be a maximum of 128 words in the SPN HEAD Table.
6. Address of subtranslator equals store address + 8 + store increment.
7. SCAN Point Number = Terminal Equipment Number for Networks 1 to 15. There are no TEN'S for scanner 0.

SPN	SCANNER				BCS				COLUMN			
	1	1	1	1	1	1	1	1	1	1	1	1
TEN	CG				SW				SWT			
	12	1	1	9	18	7	16	15	13	12	1	0
OE	CG				C				SWT			
	1	1	1	1	1	1	1	1	1	1	1	1

---Always stored in Translations

---Used on Recent Change and Input forms

LVL = Level (0-7)  
 SWT = Switch (0-7)  
 SW = Switch Group (0-2)  
 C = Concentrator (0,1)  
 CG = Concentrator Group (1-15) (Network)

8. Multipoint rules for terminal equipment number. (See also Figure 12C, Notes 3 and 4)  
Port 0, 1 and 2 TENs are identical except that:

PORT 0 must have C = 0  
 PORT 1 must have C = 1  
 PORT 2 must have C = 0 & SWT = (SWT of PORT 0 + 1)

FIG. 2A SCAN POINT NUMBER TRANSLATION - MISCELLANEOUS SUBTRANSLATOR

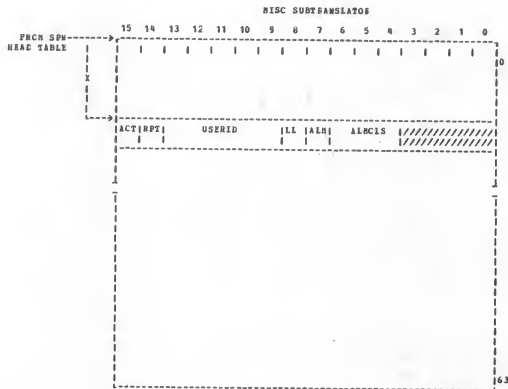




FIG. 2A (continued) - SCAN POINT NUMBER TRANSIATIC) - MISCELLANEOUS SUBTRANSLATOR.

## NOTES:

## 1. LIST OF ACRONYMS

		ISS FCAM				DESCRIPTION
ACRONYM	HC PROG	NO.	ITEM	COLUMN(S)		
ACT	RC:SP	3506	-	38	Active: ACT = 1 SFA is active	
ALD	RC:SP	3506	-	26-33	Alarm indicator: ALD = 0 No alarm. Alarm class code not used. = 1 Alarm. Alarm class code is used.	
ALNCLS	RC:SP	3506	-	26-33	ALN class (Type): ALNCLS = 0 Alarm circuit = 1 Major = 2 Minor = 3 Major power = 4 Minor power = 5 Major fuse = 6 Minor fuse = 7 Critical	
LL	RC:SP	3506	-	34-35	Last Look indicator: LL = 0 Normal state open = 1 Normal state closed	
RPT	RC:SP	3506	-	36	Report: RPT = 1 Report SPN state change. This bit is the highest bit of the USERID. It will be set for USERID greater than 31.	
USERID	RC:SP	3506		36-37	USER Identification number.  00-32 Type of fixed system scanpoint 42-44 Type of fixed system scanpoint 45-47 Assignable scanpoint 48-50 Type of fixed scanpoint 59 Assignable scanpoint 60-63 Type of fixed system scanpoint	

2. A Miscellaneous Subtranslator contains data for 64 miscellaneous scan points in 4 consecutive rows. Each group of rows 16-19, 20-23 and 24-27 in MS00 require a Miscellaneous Subtranslator. Therefore, there can be a series of 3 Miscellaneous Subtranslators.

Each word in a Miscellaneous Subtranslator contains data associated with one miscellaneous scan point in MS00.

FIG. 28 SCAN POINT NUMBER TRANSLATION - UNIVERSAL SUBTRANSLATOR

FROM SPN H&AC  
TABLE OR SV\_TBL

	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
U_TIP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
U_TIP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TERMINAL EQUIPMENT NO.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SENDER NO.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GROUP NO.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TERMINAL EQUIPMENT NO.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SENDER NO.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GROUP NO.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1ST TONE SPN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
U_TIP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUPERVISORY SPA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
U_TIP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SKET	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EX GROUP NO.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
U_TIP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NUMBER OF LINES USING SPA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
U_TIP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
127	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

FIG. 28 (continued) - SCAN POINT NUMBER TRANSLATION - UNIVERSAL SUBTRANSLATOR.

## NOTES:

## 1. LIST OF ACRONYMS

ACRONYM	RC	PCIN	NO.	LINE	COLUMN(S)	DESCRIPTION
U_TTF						Universal Subtranslator Type U_TTF = 0 Unassigned = 1 Supervisory SPN entry for trunks and service circuits with a single terminal equipment NO. (See Note 3) (See Figure 12C, Notes 3 and 4 for Willivatt and Transmission Test Ckt.) = 2 Supervisory SPN entry for service circuits with 2 terminal equipment numbers. (See Note 3) = 3 Tone present SPN entry. = 4 Directed SPN entry. = 5 PEI Key SPN entry. = 6 Key SPN entry.
TERMINAL EQUIPMENT NO.	RC:CKT	3201	-	22-27		Office equipment number.
NUMBER NO.	RC:CKT	3201	-	40-42		Trunk group number number.
GROUP NO.	RC:CKT	3201	-	37-39		Trunk group number.
1ST TONE SPN	RC:CKT	3201	-	51-56		The SPN of the first directed scan point.
SUPERVISORY SPN	RC:CKT	3201	-	45-50		Supervisory SPN.
NUMBER OF LINES USING SPN	RC:LINE	3107	-	55-60		Indicates the number of lines associated with the same SPN.
PBX GROUP NO.	RC:BLDG	3576	-	28-30		PBX Group Number.
SKEY	RC:BLDG	3576	-	27		SPN Status Key Index. SKEY = 1 thru 7 Remote Make Busy Keys = 8 Night Stop Key = 9 Stop Hunt Key

FIG. 2B (continued) - SCAN POINT NUMBERS TRANSLATION - UNIVERSAL SUBTRANSLATOR.

NOTES:

2. A Universal Subtranslator contains data associated with 64 scan points in 4 consecutive rows. Each scan point requires two words.
3. Tones, announcements and conference circuits are translated in Figure 2C.

FIG. 2C SCAN POINT NUMBER TRANSLATION - LINE SUBTRANSLATE

SEE FIG. 2	LINE SUBTRANSLATOR	15	POSSIBLE LINE ENTRIES (NOTE 1)	0
2*X	0	UNASSIGNED	0	0
	1		0	0
	2		0	0
	3		0	0
	4		0	0
	5		0	0
	6		0	0
	7		0	0
	8		0	0
	9		0	0
	10		0	0
	11		0	0
	12		0	0
	13		0	0
	14		0	0
	15		0	0
	16		0	0
	17		0	0
	18		0	0
	19		0	0
	20		0	0
	21		0	0
	22		0	0
	23		0	0
	24		0	0
	25		0	0
	26		0	0
	27		0	0
	28		0	0
	29		0	0
	30		0	0
	31		0	0
	32		0	0
	33		0	0
	34		0	0
	35		0	0
	36		0	0
	37		0	0
	38		0	0
	39		0	0
	40		0	0
	41		0	0
	42		0	0
	43		0	0
	44		0	0
	45		0	0
	46		0	0
	47		0	0
	48		0	0
	49		0	0
	50		0	0
	51		0	0
	52		0	0
	53		0	0
	54		0	0
	55		0	0
	56		0	0
	57		0	0
	58		0	0
	59		0	0
	60		0	0
	61		0	0
	62		0	0
	63		0	0
	64		0	0
	65		0	0
	66		0	0
	67		0	0
	68		0	0
	69		0	0
	70		0	0
	71		0	0
	72		0	0
	73		0	0
	74		0	0
	75		0	0
	76		0	0
	77		0	0
	78		0	0
	79		0	0
	80		0	0
	81		0	0
	82		0	0
	83		0	0
	84		0	0
	85		0	0
	86		0	0
	87		0	0
	88		0	0
	89		0	0
	90		0	0
	91		0	0
	92		0	0
	93		0	0
	94		0	0
	95		0	0
	96		0	0
	97		0	0
	98		0	0
	99		0	0
	100		0	0
	101		0	0
	102		0	0
	103		0	0
	104		0	0
	105		0	0
	106		0	0
	107		0	0
	108		0	0
	109		0	0
	110		0	0
	111		0	0
	112		0	0
	113		0	0
	114		0	0
	115		0	0
	116		0	0
	117		0	0
	118		0	0
	119		0	0
	120		0	0
	121		0	0
	122		0	0
	123		0	0
	124		0	0
	125		0	0
	126		0	0
	127		0	0
	128		0	0
	129		0	0
	130		0	0
	131		0	0
	132		0	0
	133		0	0
	134		0	0
	135		0	0
	136		0	0
	137		0	0
	138		0	0
	139		0	0
	140		0	0
	141		0	0
	142		0	0
	143		0	0
	144		0	0
	145		0	0
	146		0	0
	147		0	0
	148		0	0
	149		0	0
	150		0	0
	151		0	0
	152		0	0
	153		0	0
	154		0	0
	155		0	0
	156		0	0
	157		0	0
	158		0	0
	159		0	0
	160		0	0
	161		0	0
	162		0	0
	163		0	0
	164		0	0
	165		0	0
	166		0	0
	167		0	0
	168		0	0
	169		0	0
	170		0	0
	171		0	0
	172		0	0
	173		0	0
	174		0	0
	175		0	0
	176		0	0
	177		0	0
	178		0	0
	179		0	0
	180		0	0
	181		0	0
	182		0	0
	183		0	0
	184		0	0
	185		0	0
	186		0	0
	187		0	0
	188		0	0
	189		0	0
	190		0	0
	191		0	0
	192		0	0
	193		0	0
	194		0	0
	195		0	0
	196		0	0
	197		0	0
	198		0	0
	199		0	0
	200		0	0

(continued)

→ B (1,2,  
4 or 8 word  
expansion)





FIG. 2C (continued) SCAM POINT NUMBER TRANSLATION - LINE SUBTRANSLATOR

BILLING/DIRECTORY NUMBER EXPANSIONS																																									
FROM																																									
NOTE 2	<table border="1"> <tr> <td>0/01</td> <td>BILLING/DIRECTORY NO. (NOTE 3)</td> <td>0</td> </tr> <tr> <td>15 114</td> <td></td> <td></td> </tr> </table>	0/01	BILLING/DIRECTORY NO. (NOTE 3)	0	15 114																																				
0/01	BILLING/DIRECTORY NO. (NOTE 3)	0																																							
15 114																																									
FROM																																									
NOTE 2	<table border="1"> <tr> <td>0</td> <td>BILLING NO. (NOTE 3)</td> </tr> <tr> <td>1</td> <td></td> </tr> <tr> <td>0</td> <td>DIRECTORY NO. (NOTE 3)</td> </tr> <tr> <td>1</td> <td></td> </tr> </table>	0	BILLING NO. (NOTE 3)	1		0	DIRECTORY NO. (NOTE 3)	1																																	
0	BILLING NO. (NOTE 3)																																								
1																																									
0	DIRECTORY NO. (NOTE 3)																																								
1																																									
4/8 ITT																																									
F	<table border="1"> <tr> <td>0</td> <td>DIRECTORY NO. (NOTE 3)</td> </tr> <tr> <td>1</td> <td></td> </tr> <tr> <td>0</td> <td>DIRECTORY NO. (NOTE 3)</td> </tr> <tr> <td>1</td> <td></td> </tr> <tr> <td>1</td> <td>UNASSIGNED FCNNA1</td> </tr> <tr> <td>1</td> <td></td> </tr> <tr> <td>0</td> <td>DIRECTORY NO. (NOTE 3)</td> </tr> <tr> <td>1</td> <td></td> </tr> </table>	0	DIRECTORY NO. (NOTE 3)	1		0	DIRECTORY NO. (NOTE 3)	1		1	UNASSIGNED FCNNA1	1		0	DIRECTORY NO. (NOTE 3)	1																									
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1																																									
1	UNASSIGNED FCNNA1																																								
1																																									
0	DIRECTORY NO. (NOTE 3)																																								
1																																									
8 PARTY																																									
G	<table border="1"> <tr> <td>1</td> <td>1/11111111</td> <td>TABLE NO.</td> <td>7</td> <td>6</td> <td>ENTRY NO.</td> <td>0</td> <td>-----&gt; F (4 word expansion)</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td>(NOTE 10)</td> <td></td> <td></td> </tr> <tr> <td>1</td> <td>1/11111111</td> <td>TABLE NO.</td> <td>1</td> <td></td> <td>ENTRY NO.</td> <td></td> <td>-----&gt; F (4 word expansion)</td> </tr> <tr> <td>1</td> <td>1/11111111</td> <td></td> <td>1</td> <td></td> <td>(NOTE 10)</td> <td></td> <td></td> </tr> </table>	1	1/11111111	TABLE NO.	7	6	ENTRY NO.	0	-----> F (4 word expansion)						(NOTE 10)			1	1/11111111	TABLE NO.	1		ENTRY NO.		-----> F (4 word expansion)	1	1/11111111		1		(NOTE 10)										
1	1/11111111	TABLE NO.	7	6	ENTRY NO.	0	-----> F (4 word expansion)																																		
					(NOTE 10)																																				
1	1/11111111	TABLE NO.	1		ENTRY NO.		-----> F (4 word expansion)																																		
1	1/11111111		1		(NOTE 10)																																				
FROM MCRD 0																																									
H	<table border="1"> <tr> <td>0</td> <td>EL</td> <td>1651</td> <td>11</td> <td>CHAJ = 29</td> <td>ITTC</td> <td>SCR</td> <td></td> </tr> <tr> <td>1</td> <td>= 0</td> <td>= 0</td> <td>111</td> <td></td> <td>71 = 0</td> <td>15</td> <td>0</td> </tr> <tr> <td>0</td> <td>1</td> <td>1</td> <td>1</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>15</td> <td>12</td> <td>111</td> <td>110</td> <td>DISTRIBUTOR TRILET ADDRESS</td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>SLEEVE LEAD</td> <td></td> <td></td> <td>0</td> </tr> </table>	0	EL	1651	11	CHAJ = 29	ITTC	SCR		1	= 0	= 0	111		71 = 0	15	0	0	1	1	1					15	12	111	110	DISTRIBUTOR TRILET ADDRESS								SLEEVE LEAD			0
0	EL	1651	11	CHAJ = 29	ITTC	SCR																																			
1	= 0	= 0	111		71 = 0	15	0																																		
0	1	1	1																																						
15	12	111	110	DISTRIBUTOR TRILET ADDRESS																																					
				SLEEVE LEAD			0																																		

(continued)



FIG. 2C (continued) SCAN POINT NUMBER TRANSLATION - LINE SUBTRANSLATOR

FROM WORD 1	15.	14.	13.	12.	11.	10.	9.	8.	7.	6.	5.	4.	3.	2.	1.	0
J AUTOCONNECT	0															
	0															
	0															
	1	1	1	1												
					11											
						TABLE NO.										
							716									
								ENTRY NO.								
								(NOTE 5)								
K AUTOCONNECT	0															
K EXPANSION	0															
	0															
	0															
	0															
	0															
	0															

LINE DATA WORDS (NOTES 4 &amp; 5)

[illegible]

NOTES:

## 1. KEYWORD CROSS-REFERENCE &amp; DESCRIPTION FOR LINE SUBTRANSLATOR ENTRIES

ENTRY	DATA NAME	INPUT MESSAGE	RES FCEN	DESCRIPTION	
		(RTY&CRD) NO. ITER(CCU)NR			
TRUNKAL LINE	TEL	INC:LINE TEL	3100-1	-- 136	Essential line (Class A service).
	IGST	INC:LINE IGST	3100-1	-- 135	Ground Start Line.
	ICORAJ	INC:LINE ICC	3100-1	-- 125-26	Originating No. 9 Class Code. See Note 13.
	ITTC	INC:LINE TTC	3100-1	-- 137	Touch Tone Calling.
	ISCF	INC:LINE ICC	3100-1	-- 129-30	Screening Class.
	ITN	INC:LINE ITN	3100-1	-- 117-23	Telephone number (NOTE 2).
NORMAL	ITER	INC:NTL ITER	3100-1	-- 148-49	Multi-line hunt group terminal number.
	IBNL	INC:NTL IBNL	3100-1	-- 146-47	Multi-line hunt group number.
	ITN	INC:NTL ITN	3100-1	-- 117-23	Telephone number (NOTE 2).
TRUNK GANA	ITER	INC:CKT ITER	3201-1	-- 140-42	Trunk group terminal (number) number.
CICIRCUITS	IGRP	INC:CKT IGRP	3201-1	-- 137-39	Trunk group number.
THREE PORT	ITER	INC:CKT ITER	3201-1	-- 140-42	Trunk group terminal (number) number.
CICIRCUIT	IGRP	INC:CKT IGRP	3201-1	-- 137-39	Trunk group number.
	IFCET NO.	INC:CKT FCF# NO	3201-1	-- 136	Port Number (0-2).
NON-LINE	SSP	SSP			Supervisory scan point flag.
					SSP = 1 2nd word contains the circuit's
					Supervisory scan point number.
					SSP = 0 2nd word contains the circuit's directed scan
					point number.
	SSP	INC:CKT SSP	3201-1	-- 145-50	Supervisory scan point number (SSF=1).
	SSP	INC:CKT SSP	3201-1	-- 51-56	Directed scan point number (SSP=0).
LINE	BLN	INC:LINE BLN	3100-1	-- N5	Special Toll Billing (QT billing).
EXPANSION		INC:BLNG			
		INC:BTI			
INCLUDING	SOB	INC:LINE SOB	---	----	Service Observing feature. This bit is recent change-
able only. It is not set by the GBA.		INC:BLNG			
		INC:BTY			
		INC:NTL			
		INC:SOBPT			
	SS	INC:LINE SS	---	----	Special studies feature. Recent changeable only.
		INC:BTY			
		INC:NTL			
		INC:SOBPT			
		INC:BLNG			

FIG. 2C (continued) SCAN POINT TRANSLATION - LINE SUBTRANSLATOR

NOTES (continued):

## 1. KEYWORD CROSS-REFERENCE &amp; DESCRIPTICA FOR LINE SUBTRANSLATOR ENTRIES (continued)

ENTRY	DATA NAME	INPUT MESSAGE		ESS FORM		DESCRIPTION
		KEYNCRD	NC	ITEM	CCIDUNH	
2 PARTY LINE	CDPR	CDPR				Exit code that indicates the type of customer dial pulse receiver to connect to the two party line. 00 = Error 01 = Attach a Touch Tone receiver denied or one is unassigned and the other is denied.
	TTC	BC1THOPTV	TTC	3100-1	-- 37	Touch Tone service.
PBX/MLNG DIFFERENT DATA PRG GROUP DATA	ITN	BC2HTL	ITN	310D-1 3107	-- 17-23 -- 17-23	Directory number (NOTE 2)

2. For lines with expanded billing information entry contains table and entry number. The high bit (bit 15) indicates if the word contains the TM or a table and entry.

HIGH BIT = 0 word contains TM.

```

= 1 word contains table and entry.

```

1	BLW	SS	SCB	TABLE NO.		ENTRY NO.		-->E (1 or 2 word ex- pansion)
15	14		12 11	7 6		(BCTE 10)		
0	PACKET BILLING NUMBER OR TM (NOTE 3)							0
15	14							

3. Packed billing or directory number. Office index = 0 is not used.

(FIG. 2E)  $\leftarrow$ 

OFFICE INDEX | 100 \* DIGIT 5 + 10 \* DIGIT 6 + DIGIT 7  
14 | 10 | 9 | 0

Packed special billing number. Office index = 31 is not expanded but indicates a special billing number (ie, for HATS).

(FIG. 2E) <--

```

-| CFFICE INDEX = 31|          SBINDI          |--->SBILTBI (FIG. 2C)
|14          10|9          0|

```



FIG. 2C (continued) SCAN POINT NUMBER TRANSLATION - LINE SUBTRANSLATOR

NOTE (continued):

## 4. KEYWORD CROSS-REFERENCE &amp; DESCRIPTION FOR LINE SUBTRANSLATOR EXPANSIONS (continued)

EXPANSION	DATA NAME	INPUT MESSAGE		ESS FORM		DESCRIPTION
		KEYWORD	NO.	ITER	COLUMN	
LINE DATA WORDS (continued)	CHL	BC:NLHG	CSL1	3105-1	- 35	Multi-line hunt group and lines are allowed to change speed call 8 list (CHL=1). See Note 8.
		BC:NLH	-	-	-	
	ESL INDEX	BC:NLHG	ESL	3100-1	- 43	Speed Calling - 1 digit service (8 nbr. list).
	CHF	BC:NLHG	CSL2	3105-1	- 33	Speed Call Index - SC8 Head Table (Program assigned).
		BC:NLH	-	-	-	Multi-line hunt group and lines are allowed to change speed call 30 list (CHF=1). See Note 9.
		BC:NLH	-	-	-	
	ESF	BC:NLHG	ESF	3100-1	- 41	Speed Calling - 2 digit service (30 list)
	ESF INDEX	BC:NLH	-	-	-	Speed Call Index - SC30 Head Table (Program assigned).
		BC:NLH	-	-	-	
	DP	BC:NLHG	DP	3107-1	- 42-47	Peripheral decoder triplet to provide a sleeve lead.
		BC:NLH	-	-	-	
		BC:NLH	-	-	-	
	DPU	BC:NLHG	DPU	3107-1	- 42-47	Periph Encoder triplet for Noise Immunity line Circuit.
	CCIN	BC:NLHG	CCIN	-	-	Coin triplet index - Coin Triplet Address Table & Coin
	TRIPLET INDEX	BC:NLHG	TRIPLET	-	-	Triplet Status Table.
		BC:NLH	-	-	-	
	ITP	BC:NLHG	ITP	3107-1	- 53	Peripheral decoder point assigned to coin line.
	ORAJ	BC:NLHG	ICC	3306-1	- 25-26	Originating major Class Code. See Note 13.
	ITC	BC:NLHG	ITC	3105-1	- 32	Touch Tone Calling features (TTC=1).
	SCB	BC:NLHG	LCC	3306-1	- 29-30	Screening Class.
	IS/D	BC:NLH	ISIN	3107-1	- 35-41	Billing/Directory - For multi-line: = 0 if BTN not typed. Use NRG group BTN. = 1 if BTN of member typed and same as TN of member. For non-multi-line: = 0 invalid state = 1 the directory number is used as the BTN.
		BC:NLH	-	-	-	
		BC:NLH	-	-	-	
	ROH	BC:NLHG	ROH	3107-2	- 54	Inhibit Rch Tone on the line = 0 if act inhibited. = 1 if inhibited.
		BC:NLH	-	-	-	
		BC:NLH	-	-	-	
	IAL	BC:NLHG	PLI1	3107-2	- 55	Prohibit Automatic line Insulation Test = 0 if act prohibited. = 1 if prohibited.
		BC:NLH	-	-	-	
		BC:NLH	-	-	-	
		BC:NLH	-	-	-	

FIG. 2C (continued) SCAN POINT NUMBER TRANSLATION - LINE SUPERTRANSLATOR

NOTES (continued):

5. Expansion entries contain 1, 2, 4 or 8 line data words as indicated, via EXPTBL, Figure 11A. If several expansion entries are provided, they are linked by means of table and entry numbers. A table and entry number word, when provided, must be the last word of the 2, 4 or 8 word expansion.
6. This word can only be part of a PDI/PLNG expansion.
7. Telephone number is stored in DCD for hct line service, 1-8 digits require a 2-word expansion; 9-11 digits require a 4-word expansion.
8. If the ESL keyword is specified on a BC and the CSL1 keyword is not, CEL is determined by the ICS bit in OFF\_DATA (Fig. 23A).
9. If the ESF keyword is specified on a BC and the CSL2 keyword is not, CHF is determined by the ICS bit in OFF\_DATA (Fig. 23A).
10. Expansion entries contain 1, 2 or 4 words as indicated, via EXPTBL, Figure 11A.
11. EP 6 CPU are mutually exclusive on a line.
12. If any trigger number entry does not contain a trigger number, then the entry follows the "UNASSIGNED FORMAT" (see "F", page 11) for directory number expansions.

(continued on next page)

## FIG. 2C (continued) SCAN POINT NUMBER TRANSLATION - LINE SURTRANSLATOR

## NOTES (continued):

## 13. ORIGINATING AND TERMINATING MAJOR CLASSES

MAJOR CLASS	ASSIGNMENT	ORIGINATING	TERMINATING
0	UNASSIGNED	I	I
1			
2			
3			
4	TWO-PARTY RING	I	I
5	TWO-PARTY TIP	I	I
6	INDIVIDUAL - TRAFFIC	I	I
7	INDIVIDUAL - FREE	I	I
8	INDIVIDUAL	I	I
9	HOTEL-HOTEL	I	I
10	MANUAL	I	I
11	TSPS SELECTIVE CALL SCREENING	I	I
12			
13			
14			
15			
16	MULTIPARTY PARTY 1	I	I
17	MULTIPARTY PARTY 2	I	I
18	MULTIPARTY PARTY 3	I	I
19	MULTIPARTY PARTY 4	I	I
20	MULTIPARTY PARTY 5	I	I
21	MULTIPARTY PARTY 6	I	I
22	MULTIPARTY PARTY 7	I	I
23	MULTIPARTY PARTY 8	I	I
24	COLN FIRST - CCIN	I	I
25	DIAL TONE FIRST - CCIN	I	I
26			
27			
28	INTERCEPT	I	I
29	AUTOCONNECT	I	I
30	DENIED SERVICE	I	I
31	SPECIAL ROUTING	I	I





FIGURE 2E OFFICE INDEX EXPANSION

OFFICE INDEX				
14				10
A B				



## NOTES:

1. OFFICE INDEX = 0 is not used. Valid office indices range from 1 to 30. Office index is a combination of NCC and thousands digit.

2. CROSS REFERENCE & DESCRIPTION FOR OFFICE INDEX EXPANSION

EXPANSION	INPUT MESSAGE	ESS FCSS	DESCRIPTION	
	KEYWORD	NC	ITER	COLUMN
OFFICE INDEX	NC:PTN	CODE	3501-1	22-24
				25
				Office Code
				Thousands digit

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SECTION 200

FIGURE 3 (UNUSED)

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FIG. 4 SCAN POINT NUMBER TRANSLATION - SERVICE CIRCUIT TABLE

SVCTBL	(FIG. 28)															
SV_TBL	0	0	0	0	1	1	0	0	0	0	1	0	0	0	0	0
	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
	NUMBER OF SVC CRT MC. ENTRIES - 1															
	SERVICE CIRCUIT TABLE ADDRESS (NOTE 2)															

-----&gt;FIG. 28

## NOTES:

1. The Service Circuit Table is a Universal Subtranslator which contains the data for the 256 scan points in the first 16 rows (0-3) of MS00.
2. The Service Circuit Table address is the address for the SPN 0 entry.  
Service Circuit Table Address = Address of word 0 in the SPN HEAD Table + store increment.

ORIGINATING LINE TRANSLATIONS

INDEX OF FIGURES

Figure 5 - Speed Calling List (1-Digit)  
Figure 6 - Speed Calling List (2-Digit)  
Figure 7 - Message Register List  
Figure 8 - Call Forwarding Table  
Figure 9 - Coin Triplet Index Information



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FIGURE 5 (continued) SPEED CALLING LIST - 1 DIGIT

NOTES:

1. THE SC1 INDEX is stored in bits 0-10 of the LINE DATA WORD, Figure 2C, or the FBI/NLHC group table, Fig. 12B.
2. The index for the SC 0 list is a function of the dialed code:  $SC1\ LIST\ INDEX = 2 * CODE - 4$ .
3. The number of digits in the two word entry is eight. If more digits are needed, the second word of the entry contains a table and entry number needed to obtain an entry in the CODLS1 translator for the rest of the digits. The digits are stored in BCD.
4. List Availability Code (LAC): LAC = 0 Vacant  
= 1 Assigned

FIGURE 6 SPEED CALLING LIST - 2 DIGIT

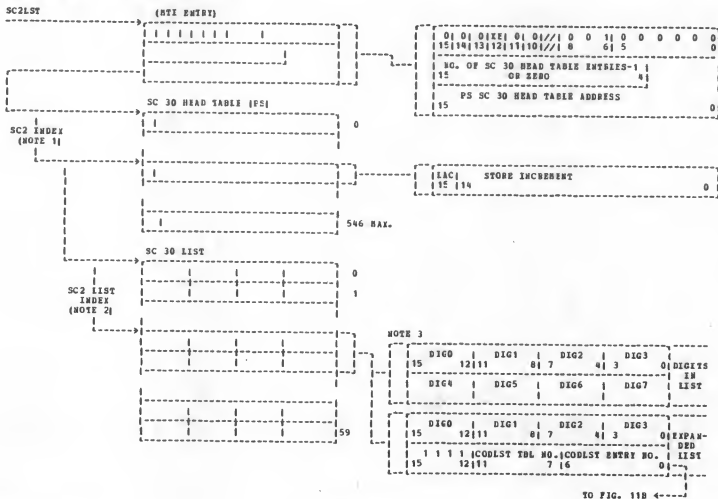




FIGURE 6 (Continued) SPEED CALLING LIST - 2 DIGIT

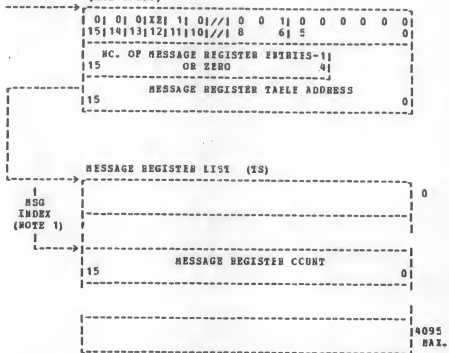
NOTES:

1. The SC2 INDEX is stored in bits 0-10 of the LINE DATA WORD, Figure 2C, or the PSX/SLSC group table, Fig. 12B.
2. The index for the SC 30 LIST is a function of the dialed code; SC2 LIST INDEX = 2 \* CODE - 40.
3. The number of digits in the tvc word entry is eight. If more digits are needed, the second word of the entry contains a table and entry number needed to obtain an entry in the CODLIST translator for the rest of the digits. The digits are stored in BCD.
4. List Availability Code (LAC): LAC = 0 Vacant  
                                       = 1 Assigned

6 5 4 3 2 1 0  
 1 1 1 1 1 1

FIGURE 7 MESSAGE REGISTER LIST

HRTBL (MTI ENTRY)



## NOTES:

1. MSG INDEX is stored in bits 0-11 in a LINE DATA WORD. See Figure 2C.



FIGURE 8B CALL FORWARDING EIGIT LIST

CFLST

(RTI ENTRY)

0	1	0	1	0	1	1	0	1	0	1	0	0	1	0	0	0	0	1	1
15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	0	0	0	0
NO. OF CF DIGIT LIST ENTRIES - 1															1				
OR ZERO															4				
CF DIGIT LIST ADDRESS																			
15																			0

CALL FORWARDING EIGIT LIST (PS) (NOTE 1)

2<sup>nd</sup> CF INDEX  
(11-0)

NOTE 2

0																0																																																								
0																List																																																								
0																Unassigned																																																								
OR																																																																								
0																0	1	1	1	1	List																																																			
15																4	3	0		Assigned																																																				
0																				But																																																				
0																				Unused																																																				
OR																																																																								
DIG 0																																																																								
15	12111				DIG 1				817				DIG 2				413				DIG 3				0				Up to 8																																											
DIG 4																						Digits																																																		
DIG 5																																																																								
DIG 6																																																																								
DIG 7																																																																								
OR																																																																								
DIG 0																						DIG 1																	DIG 2																	DIG 3																
15	12111				817				413				0				More than																																																							
1																	1					1					1					CCDLST TBL NO					CCDLST ENTRY NO					0					To Fig. 11B																									
15	12111				716																																																																			

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SECTION 300

FIGURE 82 (continued) CALL FORWARDING DIGIT LIST

NOTES:

1. DIGs (n=0-7). BCD digits are the call forwarding number. If digit position 3 = 1111, the entry is assigned but unused. If digit position 4 = 1111, the rest of word 1 is a table and entry to a digit expansion area. (Fig. 11B).
2. CF index is stored in bits 0-11 of a 16-bit data word. See Figure 2C.



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FIGURE 9A (Continued) COIN TRIPLET INDEX INFORMATION - COIN TRIPLET ADDRESS TABLE

NOTES:

1. The coin line circuit's TRIPLET INDEX is stored in a LIVE DATA WORD. See Figure 2C.

2. NETWORK CROSS-REFERENCE & DESCRIPTIONS FOR COIN TRIPLET ADDRESS TABLE

KEYWORD	INPUT MESSAGE	ESS PCBN	DESCRIPTION
		NO. ITER(COLUMNS)	
ASSIGN		--	Individual assigned points.
DPCM	RC:LINE	3107-1 -- 48-52	Coin Triplet address (NOTE 3).

3. COIN TRIPLET ADDRESS:

TRIPLET INDEX	PD NO.
10 9 8 7	0

PPD - Peripheral Pulse Distributor.  
PD - Peripheral Decoder.





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TERMINATING TRANSLATIONS

INDEX OF FIGURES

Figure 10 - 8-Digit Translation  
Figure 11 - General Purpose and Code List Expansion Tables

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FIGURE 10 FOUR DIGIT TRANSLATION

PECH TRANSIENT CALL RECORD (YCR)

YOC	THOUSANDS	HUNDREDS	TENS	UNITS
2	1	15	1	17

MOCD 421451 (STI ENTRY) (FIG. 10a)

3 \* YOC

0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23

NUMBER GROUP TABLE

THOUSANDS  
DIGIT

0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23

SEE FIG. 10b

STORE  
INCREMENT

THOUSANDS GROUP TABLE

HUNDREDS  
DIGITSTORE  
INCREMENT

SEE FIG. 10c

HUNDREDS GROUP TABLE (FIG. 10d)

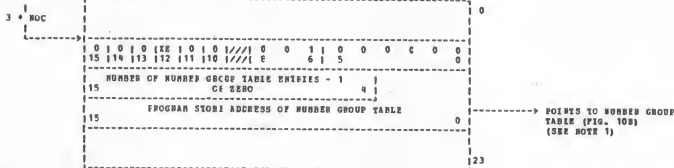
3(10 \* TENS + UNITS)

0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
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124
125
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127
128
129

FIGURE 10A FOUR DIGIT TRANSLATION - NTJ ENTRY

HOCB

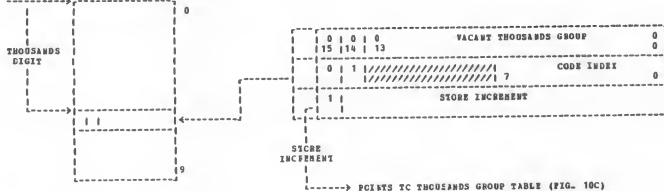
(NTI ENTRY)



NOTES:

1. To satisfy "allocation" requirements the following table arrangement is necessary. Each Huser Group table (HGT) is followed by the first assigned Thousands Group Table (TGT). Each TGT is followed by the Hundreds Group Tables (HGT). A maximum of 10 tables, associated with that TGT. After the HGT, the next assigned TGT follows with its associated (HGT). After the TG tables for the HGT, the next HGT follows with its TG and HG table.

FIGURE 10E FOUR DIGIT TRANSLATION - NUMBER GROUP TABLE OPTIONS

FROM  
FIG. 10A NUMBER GROUP TABLE (NOTE 1)

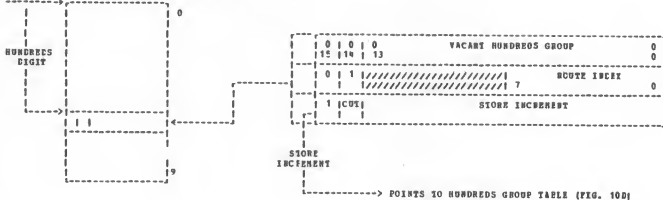
## NOTES:

- There are 3 possible one-word entries in the Number Group Table.
- DATA NAME CROSS-REFERENCE AND DESCRIPTION

DATA NAME	INPUT MESSAGE	ISE FORM			DESCRIPTION
		KEYWORD	NC.	(ITEM) COLUMNS(S)	
CODE INDEX BC:NG	CDI	3501-1	-	28-30	Code index used to route call to another office on a per thousands group basis.

FIGURE 10C FOUR DIGIT TRANSLATION - THOUSANDS GROUP TABLE

FROM  
FIG. 10B THOUSANDS GROUP TABLE (NOTE 1)



1. There are 3 possible one-word entries in the Thousands Group Table.

## 2. DATA BASE CROSS-REFERENCE AND DESCRIPTION

DATA NAME	INPUT MESSAGE	ESS FORM	DESCRIPTION
KEYWORD NO.	ITEM(COLUMNS(S))		
CUT	INC:BG	3501-1 - 127	If CUT = 1, the hundreds group is in the pre-cut state.
ROUTE INDEX	INC:BG	3501-1 - 31-33	Route Index used to route calls on per hundreds group.
			THOUSAND









## FIGURE 10c (CONTINUED) FOUR DIGIT TRANSLATION - HUNDREDS GROUP TABLE

## NOTES (CONTINUED):

## 5. DATA CROSS-REFERENCE AND DESCRIPTION

TABLE ENTRY	DATA NAME	INPUT MESSAGE	KEYWORD	NO.	ISS FCBN	DESCRIPTION
		FC:LINE	FNR	3100-1	-	63-75
UNASSIGNED WITH REMARKS	IDX_RNK					See Note 4
	MONTH_RNK	-	-	-	-	1-12 = Month of year
	YR_IDX_RNK	-	-	-	-	0-9 = Last digit of year 10-14 = Not used 15 = Entry older than 3 years
INTERCEPT FOR SPECIAL ROUTING WITH REMARKS	IDX_RNK	RC:LINE	RNR	3100-1	-	63-75
	MONTH_RNK					1-12 = Month of year
	YR_IDX_RNK					0-9 = Last digit of year 10-14 = Not used 15 = Entry older than 3 years
	ROUTE INDEX	RC:LINE	RII	3100-1	-	53-55
	TRCC	RC:LCC	TRAJ	3306-1	-	27-28
	LCC INDEX	RC:LCC	-	-	-	-
	TRCALN	RC:LINE RC:RNL	TRC	3107-2	-	56-58
						Trace & Alarm 0 = No trace 1 = Major alarm on trace 2 = Minor alarm on trace 3 = No alarm on trace
NORMAL LINE	TERMINAL EQUIPMENT NUMBER	RC:LINE	CE	3109-1	-	24-29
	TER RJ CI CD	RC:LCC	TRAJ	3306-1	-	27-28
	TRC	RC:LINE	TRC	---	-	---

(continued)

FIGURE 101 (CONTINUED) FOUR DIGIT TRANSLATION - HUNDREDS GROUP TABLE

NOTES (CONTINUED):

## 5. DATA CROSS-REFERENCE AND DESCRIPTION

TABLE ENTRY	DATA NAME	INPUT MESSAGE	ESS FORM			DESCRIPTION
			KEYWORD	NO.	ITEMS/COLUMNS(S)	
NORMAL LINE (continued)	OI	BC:LINE	GST	3100-1	- 135	If OI = 1, the Line Subtranslator has terminating translation data.  1. Ground start.  2. Call forwarding index.  3. Sleeve lead distributor triplet address.  4. Noisy line circuit distributor triplet address.
		BC:LINE	ESM	3100-1	- 139	
		BC:LINE	DF	3107-1	- 142-47	
		BC:LINE	DPG	3107-1	- 142-47	
	ROUTE INDEX	BC:LINE	RTL	3100-1	- 153-55	Route Index.
	ESI	BC:LINE	ESI	3100-1	- 138	Call waiting feature.
	LCC INDEX	BC:LCC	-	-	-	Line Class Code Index (Program assigned).
	TRCALM	BC:LINE BC:RTL	TFC	3107-2	- 156-58	Trace & Alarms. 0 = No trace 1 = Major alarm on trace 2 = Minor alarm on trace 3 = No alarm on trace
	LINE REQUIRING EXPANSION DATA	BC:LCC	TRAJ	3106-1	- 127-28	Terminating major class code. See Fig. 2C, Note 8
		BC:LINE	TFC	----	-	Call trace feature.
		BC:LINE	ESI	3100-1	- 138	Call waiting feature.
		LCC INDEX	BC:LCC	-	-	-
(continued)	TRCALM	BC:LINE BC:RTL	TFC	3107-2	- 156-58	Trace & Alarms. 0 = No trace 1 = Major alarm on trace 2 = Minor alarm on trace 3 = No alarm on trace

FIGURE 101 (CONTINUED) FOUR DIGIT TRANSLATION - WORDS GROUP TABLE  
 WORDS (CONTINUED):

## 5. DATA CROSS-REFERENCE AND DESCRIPTION

TABLE ENTRY	DATA NAME	INPUT MESSAGE		ISS FORM		DESCRIPTION
		RECEIVED	NO.	ITER	(COLUMN)S	
LINE RECEIVING EXPANSION DATA	ROUTE INDEX	RC:LINE	RTI	3100-1	- 53-55	Route Index.
(continued)	OX					If OX = 1, the Line Subtranslator has terminating translation data.
		RC:LINE	GSI	3100-1	- 35	1. Ground start
		RC:LINE	ESP	3100-1	- 39	2. Call forwarding index
		RC:LINE	DP	3107-1	- 42-47	3. Sleeve lead distributor triplet address
		RC:LINE	DFU	3107-1	- 42-47	4. Wolsky line circuit distributor triplet address
WORD/JL LINE AUTOCONNECT	TERMINAL EQUIPMENT NUMBER	RC:LINE	IOE	3100-1	- 24-29	Office equipment number.
	TER MJ CL CD	RC:LCC	THAJ	3306-1	- 27-28	Terminating Major Class Code. See Fig. 2C, Note 8 29 = Autoconnect
	RETURN TRIGGER INDEX	-	-	-	-	Return Trigger Index into the Callback Number translator.
	LCC INDEX	RC:LCC	-	-	-	Line Class Code Index (Program assigned).
	TRCALN	RC:LINE	TRC	3107-2	- 56-58	Trace & Alarms. 0 = No trace 1 = Major alarm on trace 2 = Minor alarm on trace 3 = No alarm on trace
FBI/BLNG	FBI/BLNG NUMBER	RC:STL	BRI	3100-1	- 46-47	Multi-line group number.
	1ST HUNT NUMBER	RC:STL	TES	3100-1	- 48-49	First hunt multi-line hunt group terminal (number) number. First hunt number is the number number for this IV.
(continued)						

FIGURE 10E (CONTINUED) FOUR DIGIT TRANSLATION - HUNDREDS GROUP TABLE

NOTES (CONTINUED):

## 5. DATA CROSS-REFERENCE AND DESCRIPTION

TABLE ENTRY	DATA NAME	INPUT MESSAGE	ESS FCBR	DESCRIPTION	
		KEYWORD NO.	ITER/COLUMN(S)		
PBI/HLRG (continued)	TER NJ CL CO	BC:LCC	TEAJ	3306-1 - 27-28	Terminating major class code. See Fig.2C, Note 8
	TBC	BC:NTL	TSC	---	Call trace feature.
	IOI				If OI = 1, the Line Subtranslator has terminating translation data.
		BC:NTL	GSI	3100-1 - 135	1. Ground start
		BC:HLRG	GSI	3105-1 - 130	
		BC:NTL	ESI	3100-1 - 139	2. Call forwarding index
		BC:NTL	DP	3107 - 142-47	3. Sleeve lead distributor triplet address
		BC:NTL	OPC	3107 - 142-47	4. Noisy line circuit distributor triplet address
	LAST HUNT HBR NO.	BC:NTL	LBS	3100-1 - 150-51	last hunt multi-line hunt group terminal (subscriber) number.
	LCC INDEX	BC:LCC	-	-	Line Class Code Index (Program assigned).
	TRCALB	BC:LINE BC:NTL	TSC	3107-2 - 156-58	Trace & Alarm. 0 = No trace 1 = Major alarm on trace 2 = Minor alarm on trace 3 = No alarm on trace
	PBI/HLRG NUMBER	BC:NTL	HPI	3100-1 - 146-47	Multi-line hunt group aster.
	FIRST HUNT HBR NO.	BC:NTL	TEF	3100-1 - 148-49	First hunt multi-line hunt group terminal (subscriber) number.
	TER NJ CL CO	BC:LCC	TEAJ	3306-1 - 27-28	Terminating major class code. See Fig.2C, Note 8 30 = Denied
(continued)					

FIGURE 101 (CONTINUED) FOUR DIGIT TRANSLATION - HUNDREDS GFCUF TABLE

## NOTES (CONTINUED):

## 5. DATA CROSS-REFERENCE AND DESCRIPTION

TABLE ENTRY	DATA NAME	INPUT MESSAGE		ESS FCBE			DESCRIPTION
		RC:INTL	RT1	EC	ITER	COLUMNS	
IPBE/PLW NUMBER	ROUTE INDEX	RC:INTL	RT1	3100-1	-	53-55	Route Index.
TERMINATION (continued)	LCC INDEX	RC:LCC	-	-	-	-	Line Class Code Index (Program assigned).
EXPANSION ENTRIES	TERMINAL EQUIPMENT NUMBER	RC:LINE	OF	3100-1	-	24-29	Office equipment number.
	SERIES COMPLETION NUMBER	RC:LINE	SEE	3100-1	-	56-59	The series completion number entry contains the 4-digit station number in BCE. The ECC is the same as the entry HCC.
	KEY SCAN POINT NUMBER	RC:LINE	SP	3107-1		56-60	A scan point entry is required for the following type of lines: 1. Individual lines requiring the remote make busy feature. 2. Mobile radio lines. 3. 1A Concentrator lines. 4. Group alerting lines. 5. Subscriber loop multiplexer lines.
	ZONE (TN)	RC:LINE	DSY	3107-1	-	55	Zone 0 = Reorder 1 = Busy

FIGURE 11 EXPANSION TABLES

FIGURE 11A GENERAL PURPOSE EXPANSION TABLES

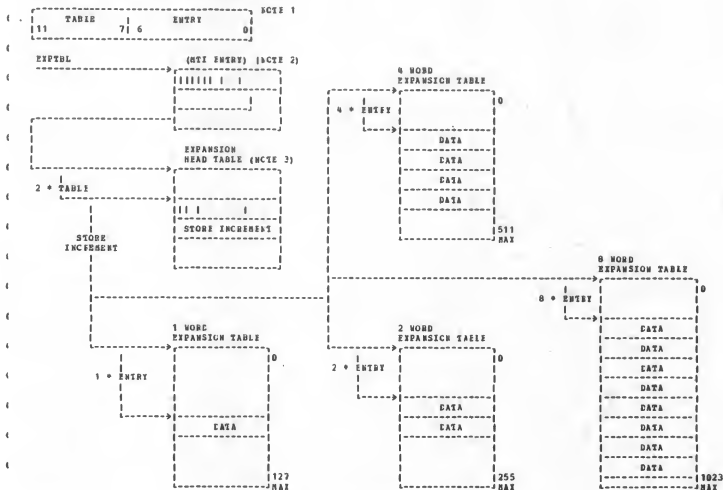




FIGURE 11B CODE LIST EXPANSION TABLES

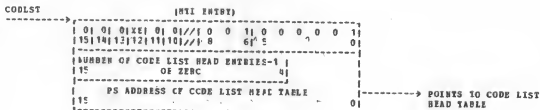




FIGURE 118 (CONTINUED) CODE LIST EXPANSION TABLES

## NOTES:

1. The following tables require Code List Expansion Tables for additional digit storage:
  - a) Speed Call 8 List.
  - b) Speed Call 30 List, and
  - c) Call Forwarding Variable.
2. Master Table Index Entry

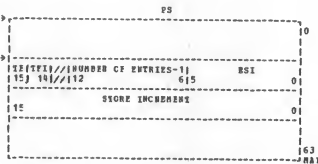


## 3. CODE LIST HEAD TABLE

POINTED TO BY  
NTI ENTRY

2 \* TABLE

STORE  
INCREMENT



POINTS TO 2 OF 4 WORD EXPANSION TABLE

ENTRY SIZE INDICATOR (ESI) = LOG (NO. OF WORDS IN ENTRY). The valid entries for ESI are 1 & 2 for 2 & 4 word entries.

IF TE = 1, then the Table Exists.

IF TFI = 1, then the Table is full (all entries are used).

4. DN - n = 4 to 19 BCD digits.  
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GROUP TRANSLATIONS

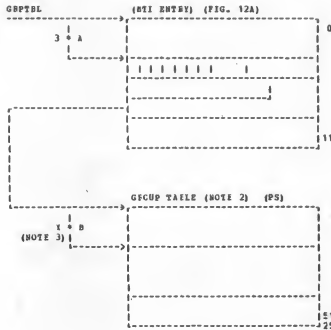
INDEX OF FIGURES

Figure 12 - Group Translation - PBX/HLHG, Service Circuits, Trunks  
Figure 13 - Selection Status Elccks  
Figure 14 - 3-Port Status Sits  
Figure 15 - Resler Lists

FIGURE 12 GROUP TRANSLATION 421410

(NOTE 1)

GROUP NUMBER	
(7) 615	0
A	B



## NOTES:

- The GROUP NUMBER is from the Universal Subtranslator (SPS translation Fig. 2B) or from the Route Index Translator (Fig. 18).
- There are 3 types of group tables:
  - PSX/HLHG Group Table (Fig. 12B).
  - Service Circuit Group Table (Fig. 12C).
  - Trunk Group Table (Fig. 12D).
- X = 8 for PSX/HLHG and Trunk Group Tables.  
X = 4 for Service Circuit Group Table.

FIGURE 12A GROUP TRANSLATION - RTI ENTRY

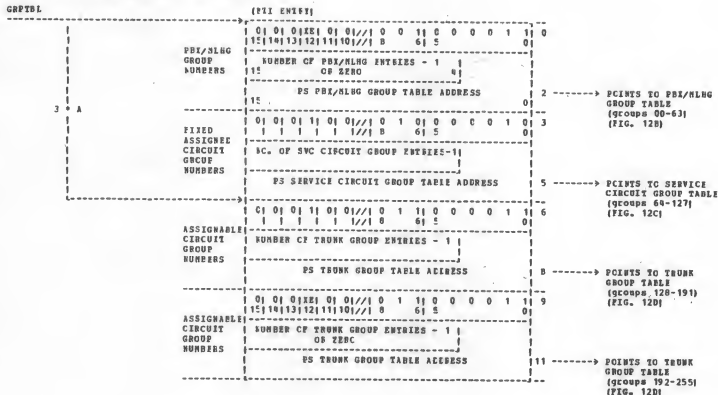


FIGURE 12B GROUP TRANSLATION - PDE/HLNG GROUP TABLE

POINTED TO BY HTI ENTRY		PDE/HLNG GROUP TABLE (PS)		
0 + E				0
		15CJEL JST1///1 ORIG MAJOR CLASS [ITC] SCREENING CLASS		
		15 114 113 ///111 7 1 6 1 5		0
GPS=00		SELECTIVE STATUS BLOCK INDEX (TS)		---
15 14 113		(See Fig. 1A, para. 2b)		0 1
				(FIG. 13)
GPR=00		MEMBER LIST INDEX		---
		(See Fig. 1A, para. 1d)		0 1
				(FIG. 15)
0		STILLING NUMBER		
114		(SEE FIG. 2 NOTE 3)		0
///10LWISS [SOB]CHL		SPEED CALL 8 INDEX		---
///114 113 112 111 110				0 1
				(FIG. 5)
ICC INDEX [CHF]		SPEED CALL 30 INDEX		---
15 12 111 110				0 1
				(FIG. 6)
EG ITRAF SCHE 1		HUNT SIZE 1 HIGHEST MEMBER NUMBER		
15 114 12 111		6 1 5		0
		SEE NOTE 2		
				1511 MAY

(continued)

FIGURE 12E (CONTINUED) GROUP TRANSLATION - FBI/ALBG GROUP TABLE

EXPANSION ENTRIES (NOTE 3)

## 2, 4 or 6 WORD EXPANSIONS

//////////	NIGHT STOP MEMBER NO. 1	STOP HUNT MEMBER NO. 1	0
//////////	6 1 5	0 1	
//////////	KEY SPN		1
//////////	12	0	
//////////	KEY SPN		3
//////////	KEY SPN		
//////////	KEY SPN		
//////////	KEY SPN		
//////////	KEY SPN		
//////////	KEY SPN		
//////////	KEY SPN		
//////////	SEE NOTE 4		1, 3 or 7

## 2, 4 or 8 WORD EXPANSIONS

//////////	KEY SPN	0	
//////////	12	0	
//////////	KEY SPN		1
//////////	KEY SPN		
//////////	KEY SPN		
//////////	KEY SPN		1, 3 or 7

FIGURE 12B (CONTINUED) GROUP TRANSLATION - PBX/MLNG GBCUC TABLE

## NOTES:

## 1. DATA CROSS-REFERENCE AND DESCRIPTIONS

DATA	INPUT MESSAGE	ISS FORM		DESCRIPTION
		KEYWORD	SUBFIELD COLUMN(S)	
ESC	RC:NLNG	ESC	3105-1137	Threeway calling feature
EL	RC:NLNG	EL	3105-1131	Essential line (Class A line)
GST	RC:NLNG	GST	3105-1130	Ground start.
ORIG MAJOR CLASS	RC:NLNG	LCC	3105-1127-29	Originating major class code. See Fig. 2C, Note 8.
TTC	RC:NLNG	TTC	3105-1132	Touch-Tone calling feature.
SCREENING CLASS	RC:NLNG	LCC	3105-1127-29	Screening class.
GPS	RC:NLNG	HNL	3105-1120-21	High 2 bits of group number (GPS = 00)
GPN	RC:NLNG	HNL	3105-1120-21	High 2 bits of group number (GPN = 00)
BLW	RC:NLNG	BLW	3105-1138	Special toll billing (QT billing, CNE).
SOE	RC:NLNG	SOE	----	Service observing feature.
CHL	RC:NLNG	CHL	3105-1135	If CHL = 1, the NLNG lines are allowed to dial in direct changes to the group's speed call 1-digit list.
CHF	RC:NLNG	CHF	3105-1133	If CHF = 1, the NLNG lines are allowed to dial in direct changes to the group's speed call 2-digit list.
SPEED CALL 8 INDEX	RC:NLNG	ESL	3105-1136	Used to index the SC 8 HEAD TABLE (FIG. 5). The index is program assigned when speed call 1-digit service is given. The index must be $\geq 1$ , if assigned.
SPEED CALL 30 INDEX	RC:NLNG	ESF	3105-1134	Used to index the SC 30 HEAD TABLE (FIG. 6). The index is program assigned when speed call 2-digit service is given. The index must be $\geq 1$ , if assigned.



FIGURE 128 (CONTINUED) GROUP TRANSLATION - PEI/RING GROUP TABLE

## NOTES:

## 1. DATA CROSS-REFERENCE AND DESCRIPTIONS

DATA	INPUT MESSAGE	ISS FORB	DESCRIPTION
PE	KEYWORD	NUMBER	CLLUPN(S)
TRAF SCHED	RC:NLHG	SCHED	3105-1150
			IF PE = 1, the PEI/RING exists.
			Traffic schedule: IF TRAF SCHED = 000, no schedule (reserved). = 001, no schedule (reserved). = 010, h schedule. = 011, c schedule. = 100, d schedule.
HUNT SIZE	RC:NLHG	HSZ	3105-1124-25
			Last huntable terminal for the group.
HIGHEST MEMBER NUMBER	DIST:GRP	-	3105-1122-23
			Highest member number in group, including spares.
STP	RC:NLHG	ENT	3105-1148-49
			IF STP = 1, the PEI/RING has a stop hunt feature.
NIT	RC:NLHG	NST	3105-1146-47
			IF NIT = 1, the PEI/RING has the night stop feature.
NIGHT STOP MEMBER NO.	RC:NLHG	NST	3105-1146-47
			Last terminal to be hunted when the night stop feature exists (NIT = 1).
STOP HUNT MEMBER NO.	RC:NLHG	ENT	3105-1148-49
			Last terminal to be hunted when the stop hunt feature exists (STP = 1).
ISS	RC:NLHG	SS	-- --
			Special studies feature. Recent changeable only.
EXB	-----	-	-- --
			IF EXB = 1, the PEI/RING has SFRs assigned for remote wake busy, stop hunt and/or night stop and the SFRs are in an expansion entry. SEE NOTE 2.
EE	-----	-	-- --
			IF EE = 1, the PEI/RING has another expansion entry. SEE NOTE 2.
KEY SPN	RC:NLHG	3576	120-25
			Key Scan Point Number used for night stop key, stop hunt key, and the 7 remote wake busy keys. SEE NOTE 3.
LCC INDEX	RC:LCC	-	-- --
			Line Class Code Index (program assigned).

FIGURE 12B (CONTINUED) GROUP TRANSLATION - PBX/NLHG GROUP TABLE

## NOTES: (CONTINUED)

2. Word 7 of the PBX/NLHG group data can take on either of 3 formats. The second format is used when the PBX/NLHG has night stop and/or stop hunt seahers, but not SEN keys. The third format is used when the PBX/NLHG has SEN keys.

15.	14.	13.	12.	11.	10.	9.	8.	7.	6.	5.	4.	3.	2.	1.	0.
[XIB] 0   0   10-   0															
[=0   1   111   1															
[XIB] [STP] [NIT] [1111] NIGHT STCP MEMBER   STOP HUNT MEMBER															
[=0   1   111111   6   5   0															
[XIB] [STP] [111111]   TABLE NO.   ENTRY NO.															
[=1   1   111111   7   6   0															

----> TO 2, 4 OR 8 WORD  
EXPANSION

3. The SPNs in the expansion entries are stored sequentially as they are inputted. The size of the expansion needed is dictated by the quantity of scan point keys.
4. The last word of the 2, 4 or 8-word expansion entry can take on either of 2 formats. The second format is used when the key SPN data needs more than a 2-word entry (more than 1 PBX key), or a 4-word entry (more than 3 PBX keys), or an 8-word entry (more than 7 PBX keys). The maximum number of KEY SPNs is 5.

15.	14.	13.	12.	11.	10.	9.	8.	7.	6.	5.	4.	3.	2.	1.	0.
[EE] [11111111]   KEY SEN															
[=0   11111111															
[EE] [11111111]   TABLE NO.   ENTRY NO.															
[=1   11111111   7   6   0															

----> TO 2, 4 OR 8 WORD  
EXPANSION

FIGURE 12C SERVICE CIRCUIT GROUP TABLE

POINTED TO BY NTI ENTRY		SERVICE CIRCUIT GROUP TABLE PS		
4	8			0
		TRAFFIC SCHEDULE INDEX (SEE FIG. 13)		HIGHEST MEMBER NUMBER
		15 13		0
		STATUS BLOCK INDEX (SEE FIG. 14, para. 20)		0
		15 14 12		0
		MEMBER LIST INDEX (SEE FIG. 14, para. 10)		0
		15 1		0
		CIRCUIT CODE (NOTE 2)		0
		15 14		0
				255 MAX

## NOTES:

## 1. DATA CROSS-REFERENCE AND DESCRIPTION

DATA	INPUT MESSAGE	ESS PCDP	DESCRIPTION
	KEYWORD	FUNCTION	COLUMN(S)
TRAFFIC SCHEDULE	PC:GRP	SCHED	3201-125
			Traffic schedule: If TRAFFIC SCHEDULE = 000, no schedule (reserved). 001, no schedule (reserved). 010, B schedule 011, C schedule 100, D schedule
NUMBER	PC:CKY	TER	3201-140-42
			If SBR = 1, the group has at least one member.
GROUP	DIST:GRP	GRP	3202-122-24
			Group exists flag.
HIGHEST MEMBER NUMBER	DIST:GRP	-	3207-126-28
			Highest member number in group, including spares.

FIGURE 12C (continued) SERVICE CIRCUIT GROUP TABLE

NOTES (continued):

## 1. DATA CROSS-REFERENCE AND DESCRIPTION (continued)

DATA	INPUT MESSAGE		ISS FORM		DESCRIPTION
	KEYWORD	WORD#	COLUMN(S)		
GPS	RC:GRP	GRP	3202-1122-24		High 2 bits of group number (GPS = 01).
GPH	RC:GRP	GRP	3202-1122-24		High 2 bits of group number (GPH = 01).
CIRCUIT CODE	RC:GRP	CKT	3202-1143-44		Circuit code (NOTE 2).

## 2. CIRCUIT CODE DESCRIPTION AND SERVICE CIRCUIT GROUP CROSS-REFERENCE (See Note 5)

CIRCUIT GROUP CODE	NO.	DESCRIPTION	SE	CPS-PB
0	77	Local Overtime Coin and/or Stuck Coin Announcement		
	78	Dial Tone First Coin Announcement		
	79	Permanent Signal Announcement		
	80	Partial Dial Announcement		
	81	No "1" dialing error announcement		
	82	Extra "1" dialing error announcement		
	83	Vacant code and no such number announcement		
	84	Custom calling error announcement		
	85	Remote recording announcement		
	91	Test group for tone and announcement circuits		
	92	Receiver off-hook tone		
	93	Busy tone		
	94	High tone		
8	95	Low tone		
	96	Call waiting tone		
	97	Loop Check Generator tone		
	103	NOTL Control Circuit	99392	--
	65	Customer Dial Pulse Receiver	3H410	367
	64	Touch-Tone Receiver - includes: Customer Dial Pulse Receiver and Touch-Tone Calling Detector	3H410 3H401	367
	66	Multifrequency Receiver	3H402	
	67	Multifrequency Transmitter	3H404	

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FIGURE 12C (continued) SERVICE CIRCUIT GROUP TABLE

NOTES (continued):

## 2. CIRCUIT CODE DESCRIPTION AND SERVICE CIRCUIT GROUP CROSS-REFERENCE

CIRCUIT GROUP CODE	NO.	DESCRIPTION	SD	CPS-FB
12	68	Dial Pulse Transmitter	3H403	403
13	69	Regular Ringing (See Figure 34, Note 8 for Scan Rate)	3H410	358
14	70	Superimposed Ringing (See Figure 34, Note 8 for Scan Rate)	3H406	375, 376
15	71	Coin Control	3H411	423
16	104	Conference Circuit	3H230	427
18	110	Station Ringer Test	3H520	521, 522
19	111	Other test circuits (NOTE 3).		

## 3. Other test circuits are included in one service circuit group with fixed member number assignments. (See Note 1)

CIRCUIT GROUP CODE	NO.	NO.	ASSIGNED MEMBERS FOR GROUP 111	SE	CPS-FB
		0	Tone Presence Detector		516, 517
		1	Milliwatt and Transmission Environment Test - Port 0 (Note 4)		505-509
		2	Continuity and Polarity Test		500
		3	Loop Environment Test		510
19	111	4	Milliwatt and Transmission Environment Test - Port 1 (Note 4)	3H520	505-509
		5	Dial Pulse Receiver Test		501, 502
		6	Transmission Test Termination		504
		7	Line Insulation Test		669
		8	Touch-Tone Receiver Test		526-529

4. This test circuit does not follow the multiport rules given in Section 200, Note 8. Each port has its own SFB, TEN and follows the universal subtranslator type 1.

FIGURE 12C (continued) SERVICE CIRCUIT GSCDP TABLE

NOTES (continued):

## 5. SERVICE CIRCUIT CODE DEFINITION TABLE.

CR1 CODE	DESCRIPTION	# OF PONES	# OF S SPH	# OF D SPH	# OF TP SPH	# OF DTA
0	ZONE & ANNOUNCEMENT CRTS	1	1	0	0	0
8	CUSTOMER DIAL PULSE RECEIVER CKT	1	1	0	0	1
9	TOUCH-TONE RECEIVER - INCLUDES: CUSTOMER DIAL PULSE RECEIVER CKT	1	1	0	0	1
10	TOUCH-TONE CALLING EXCHANGE CKT	0	0	8	1	0
11	MULTIFREQUENCY RECEIVER CKT	1	1	6	1	1
12	MULTIFREQUENCY TRANSMITTER CKT	1	1	2	0	3
13	DIAL PULSE TRANSMITTER CKT	1	1	1	0	1
14	REGULAR RINGING CRT	1	1	1	0	1
15	SUPERIMPOSED RINGING CRT	1	1	1	0	2
16	CCIM CORREL CRT	1	1	0	0	1
17	CONFERENCE CRT	3	0	0	0	0
18	STATION RINGER TEST CRT	2	1	8	1	1
19	OTHER TEST CIRCUITS:					
	CONTINUITY & POLARITY TEST	1	1	0	0	1
	DIAL PULSE RECEIVER TEST	1	1	0	0	2
	TRANSMISSION TEST TERMINALICS	1	1	0	0	1
	RW & TRANSMISSION ENVIRONMENT TEST	2	2	0	0	2
	LOOP ENVIRONMENT TEST	1	1	1	0	2
	LINE PRESENCE DETECTOR	1	1	0	0	1
	LINE INSULATION TEST	1	1	2	0	4
	TOUCH-TONE RECEIVER TEST	1	1	0	0	5

FIGURE 120 TRUNK GROUP TABLE

TRUNK GROUP TABLE										PS	
POINTED TO BY RTI ENTRY											
B * B											
TRAFFIC SCHEM										0	
15 12											
HBB   GE   HIGHEST MEMBER NUMBER											
0   7   6											
GPS   SELECTION STATUS BLOCK INDEX (TS)										11-->GRPSTAT	
(See Fig. 1A, para. 2B)										(FIG. 13)	
GPR   MEMBER LIST INDEX										12-->MRHLST	
(See Fig. 1A, para. 1D)										(FIG. 15)	
CIRCUIT CODE (NOTE 2)										13	
4											
DISC   DTLR   LTD   NT   EN   2WAY   LE   OLP   START   CRF   CDE   CYP										14	
15 14   13   12   11   10   9   7   6   5   4   3   2   1											
CHGE   RTG   ID_XLN   NF_X										15	
15 12   11 9   7   6											
EBS   STP   AUD   SIG										16	
5   3   2   1											
NO   DGN   TOTANI										17	
DGN   5											

FIGURE 120 (continued) TRUNK GROUP TABLE

## NOTES:

## 1. DATA CROSS-REFERENCE AND DESCRIPTION

DATA	INPUT MESSAGE		SIS FORM		DESCRIPTION
	RC:GRP	SCBUD	KEYWORD	NUMBER COLUMN(S)	
TRAFFIC SCHED	RC:GRP	SCBUD	3202-3	25	Traffic schedule: If TRAFFIC SCHED = 000, no schedule (reserved) 001, no schedule (reserved) 010, B schedule 011, C schedule 100, D schedule
NBE	RC:CKT	TEP	3201-1	40-42	If NBE = 1, the group has at least one seeder.
GE	DIST:GRP	GRP	3202-3	22-24	If GE = 1, the group exists.
HIGHEST MEMBER NUMBER	DIST:GRP	-	3202-3	26-26	Highest seeder number in group, including spaces.
GPS	RC:GRP	GRP	3202-3	22-24	High 2 bits of group number (GPS > 01).
GPN	RC:GRP	GRP	3202-3	22-24	High 2 bits of group number (GPN > 01).
CIRCUIT CODE	RC:GRP	CKT	3202-3	22-24	Circuit code (MCTE 2).
DISC	RC:GRP	DISC	3204-1	30-33	Type of disconnect supervision required. DISC = 00, regular hold - standard disconnect procedures are used. = 01, joint hold - both parties must go on-hook (trunks to recording completing operator). = 10, service hold - disconnect when distant party goes on-hook (Toll Switch, XSPS, or No-Test). = 11, customer hold - disconnect when calling party goes on-hook. If this disconnect supervision is specified, AUDS is not allowed (CAN and non-operator intercept trunks; i.e., answer supervision is not expected).
BYLK	RC:GRP	BYLK	3204-1	53	Bylink trunk from SIS office. (See Figure 34, Note 8 for Scan Rate)
LTD	RC:GRP	CKT	3202-3	22-24	If LTD = 1, the trunk is from or to a local test desk for circuit code = 17 (See Figure 34, Note 8 for Scan Rate)
NT	RC:GRP	NT	3204-1	56	If NT = 1, the trunk is a NC Test Trunk.



FIGURE 12D (continued) TRUNK GROUP TABLE

NOTES (continued):

## 1. DATA CROSS-REFERENCE AND DESCRIPTION (continued)

DATA	INPUT MESSAGE	TSS CODE		DESCRIPTION
		RETURN	COLUMN(S)	
EN	RC:GRP	EN	3204-1129	Type of trunk supervision: If EN = 0, loop supervision is used. EN = 1, E & H supervision is used.
2WAY	RC:GRP	DR	3202-3140-02 3204-1125-23	If 2WAY = 0, the traffic on the trunk is in one direction only. = 1, the traffic on the trunk is in both directions.
LP	RC:GRP	LP	3204-1142	If LP = 1, long loop pulsing is required.
OLP	RC:GRP	OLP	3204-1141	If OLP = 1, overlap outpulsing is permitted.
START	RC:GRP	SI	3204-1149	Start dial, specifies when to begin outpulsing on the outgoing trunk. START = 00: Immediate start (by-lick) - specifies that outpulsing is to begin after the trunk is seized, or no outpulsing is required. = 01: Delay dial - specifies that outpulsing is to be delayed until the signal which is received from the distant office at seizure time, changes to on-hook. = 10: Wink start - wait 350 msec for end of wink. If a two-way trunk, a wink duration of greater than 350 msec assumes a glare situation and to let the other office win. = 11: Wink start (2-way only) - wait 1000 msec for end of wink.
ORF	RC:GRP	ORF	3204-1139	If ORF = 1, NF outpulsing is required and ODP must be zero, except for trunks to SIS CANA, in which case both ORF & OFE must = 1. For this case, OTYP must = 01.
ODP	RC:GRP	ODP	3204-1140	If ODP = 1, DP outpulsing is required and ORF must be zero, except for trunks to SIS CANA, in which case both ORF & OFE must = 1. For this case, OTYP must = 01.
OTYP	RC:GRP	OTYP	3204-1134 3204-1135 3204-1136 3204-1137	Outgoing trunk type. OTYP = 00: Regular trunk group. = 01: CANA trunk group. = 10: TSP trunk group or DAC on TSPS trunk group. = 11: TSPS trunk group.

FIGURE 12D (continued) TRUNK GROUP TABLE

NOTES (continued):

## 1. DATA CROSS-REFERENCE AND DESCRIPTIONS (continued)

DATA	INPUT MESSAGE	ESS POST	DESCRIPTION
	KEYWORD	NUMBER(COLUMN(S))	
CHGE	RC:GRP	CHGE 3204-156	Charge: specifies that calls to a free termination line from this trunk are to be given answer supervision. This allows charging on incoming calls even if it is to a free termination, and also for proper operation of operator cord lamps. This bit should be set for all incoming operator and toll completing trunks. CHGE = 0 if free terminating line should not return answer supervision.
RTEQ	RC:GRP	RTEQ 3204-157	Remote Test Equipment Facilities: If RTEQ = 0, dedicated facilities are provided for local test desk. If RTEQ = 1, remote test equipment facilities (SD-99311-01) are provided for local test desk. Autoconnect procedures are used.
ID_XIN	RC:GRP		Incoming digit translation code which directs the initial translation as follows: ID_XIN = 000; trunk is 1 way outgoing.
		IR 3202-140	
		3204-125	
		NDE 3202-138	
		CODE 3202-135-37	
		NDE 3203-138	
		CODE 3203-135-37	
		TBL 3203-131-32	
		SCR 3203-133-34	
		NDE 3203-139	
		CODE 3203-135-37	
		THDIG 3203-139	
			<ul style="list-style-type: none"> <li>= 01; NDE = 4, the 4 digits of the station number are expected. These digits are used in ID_AUI area.</li> <li>= 010; NDE = 5, five digits are expected. Ignore the first digit and use the last four in the 4-digit translator specified in the ID_AUI area.</li> <li>= 011; use one-digit translation on first digit received.</li> <li>= 100; Use 3-digit translation of first 3 digits received.</li> <li>= 101; the last 3 digits of the station number are expected. Form a 4-digit number from most significant [1000's] digit provided by ID_AUI and 3 received digits, then use 4-digit translation.</li> </ul>

FIGURE 12D (continued) TRUNK GROUP TABLE

NOTES (continued):

## 1. DATA CROSS-REFERENCE AND DESCRIPTION (continued)

DATA	INPUT MESSAGE	ISS FORM		DESCRIPTION
		KEYWORD	NUMBER COLUMN(S)	
INF_I	RC:GRP	INF	3204-155	Multifrequency pulsing: INF = 0; dial pulse pulsing expected from far office (default case). = 1; multifrequency pulsing expected from far office. If CISCOUT CODE = 4, then SF pulsing is required.
			3204-154	
ID_AUI	RC:GRP			Auxiliary information required for initial digit translation on incoming calls. Interpretation is based on ID_ILS: ID_ILS = 1 or 2 ID_AUI B(2-0) = NOC = 3 B(5-0) = Table Selector number (One Digit Translator). = 4 B(4-0) = Screening class = 5 B(6-3) = Thousands Digit B(2-0) = NOC
			CCDB 3202-335-37	
			TBL 3202-331-32	
			SCR 3202-233-34	
			TBDIG 3202-339	
EBS	RC:GRP	EBS	3204-161	EBS = 0; Not a 911 trunk (use inbound and multi-wink signaling). = 1; Emergency Bureau Service 911 trunk. (See Figure 34, Note 8 for Scan Rate)
STP	RC:GRP	STP	3204-146	Stop-go: STP = 0; interruption of pulsing is not permitted on outgoing trunk (default case). = 1; interruption of pulsing is permitted on outgoing trunk. Required for outgoing trunks to SIS Toll and SIS Tandem offices. Dial pulse outpulsing is required.
AUIB	RC:GRP	AUIB	3204-147	Audible: AUIB = 0; do not return audible (default case). = 1; return audible on the outgoing trunk (outgoing to 23 intercept system, recording completing operator, etc.). Disconnect supervision cannot be customer hold (DISC ≠ 3). Note: Answer supervision is expected.

FIGURE 12D (continued) TRUNK GROUP TABLE

NOTES (continued):

## 1. DATA CROSS-REFERENCE AND DESCRIPTION (continued)

DATA	INPUT MESSAGE		ISS FORM		DESCRIPTION
			KEYWORD	PHONE/COLUMN(S)	
SIG	RC:GRP	SIG	3204-1	44,45	Type of signalling - for toll switch, recording completing operator, 2-way operator-office, TSPS, and Verifications (No-test) trunk groups: 00 = SF Inband or Multiwink signalling are not used. 01 = SF Inband signalling. 10 = Multiwink signalling used for TSP or TSPS. 11 = Expanded SF Inband signalling used for TSPS. Codes 10 & 11 provide for use of the "operator attached" and "detached" signals from TSP(s) with DTF coin, as well as the "ring-back", "coin collect", and "coin return" functions actually provided by code 01. (See Figure 34, Note 8 for Scan Rate)
TOTANI	RC:GRP	TOTANI	3202-3	29-30	Terminal Office Test Access Number Index. A one or 2 digit test access number index. Range 1 through whatever the maximum (defined index is for this office (maximum of 3)). See TOTANTBI (ETI). The access number index must be an assigned number. A TOTANI can not be specified for TSP, TSPS, or operator trunks.
NO_DGN	RC:GRP	IDGN	3204-1	63	NO_DGN = 0, run diagnostics via daisy chain. = 1, do not run diagnostics via daisy chain.
DGN	RC:GRP	OTO	3204-1	62	Type of diagnostics during daisy chain. DGN = 0, continuity test only. = 1, run diagnostics per the TOTANI index (office to office test)

FIGURE 12D (continued) TRUNK GROUP TABLE

NOTES (continued):

## 2. CIRCUIT CODE DESCRIPTION AND TRUNK GROUP CROSS-REFERENCE (See Note 3)

CIRCUIT CODE	TRUNK GROUP NO.	DESCRIPTION	SE	CPS-FB
1		Two-way E&M Lead Trunk with Type 2 Interface	3B220	382
1		Two-way E&M Lead Trunk with Type 3 Interface		391
1		D4 Direct interface circuit	3C304	3C320
2		Spare		
3		Incoming Reverse Battery Trunk (wink or immediate)/911 Trunk		371
129- 255		Incoming Reverse Battery Trunk (delay dial)	3B220	370
5		Outgoing Reverse Battery High-Low Trunk		399
6		Spare		
7		Office to Office Test Trunk		429
17		Incoming Local Test Desk (No. 14 & 16)	3B520	519
--	128	Holding group for spare trunks of indicated types	3B220	370, 371, 382, 391, 399, 429

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FIGURE 12D (continued) TRUNK GROUP TABLE

NOTES (continued):

3. TRUNK CIRCUIT CODE DEFINITION TABLE

CRT CODE	DESCRIPTION	# OF PORTS	# OF S SPN	# OF D SPN	# OF TP SPN	# OF DIA
1	TWO-WAY E6R LEAF TRUNK	1	1	0	0	1
1	TWO-WAY E6R TRUNK WITH TYPE 2 INTERFACE	1	1	0	0	1
1	TWO-WAY E6R TRUNK WITH TYPE 3 INTERFACE	1	1	0	0	1
2	SPARE					
3	INCOMING REVERSE BATTERY TRUNK (WINK OR IMMEDIATE)	1	1	0	0	1
4	INCOMING REVERSE BATTERY TRUNK (DELT DEAL)	1	1	0	0	1
5	OUTGOING REVERSE BATTERY HIGH-LOW TRUNK	1	1	0	0	1
6	SPARE					
7	OFFICE TO OFFICE TEST TRUNK	1	1	0	0	1
17	INCOMING LOCAL TEST DESK (NO. 14 & 16)	1	1	4	0	1

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FIGURE 122 (continued) TERMINAL OFFICE TEST ACCESS NUMBER TRANSLATION

## NOTES (continued)

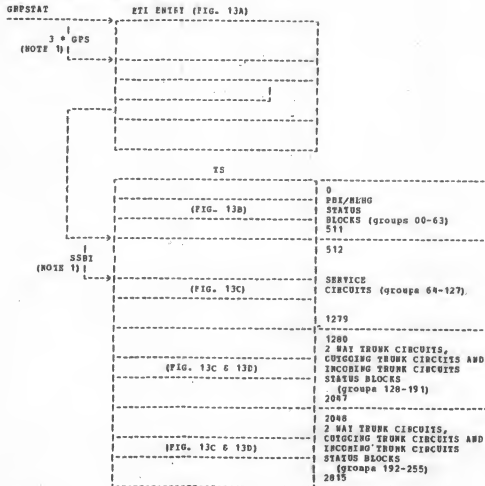
## 3. DATA CROSS-REFERENCE AND DESCRIPTIVE

DATA	INPUT MESSAGE		ESS FCSN			DESCRIPTION
	RETRWD	RETRFS	ITER	COLUM		
TL1A-G	-	-	-	-	-	Permanent busy test line number. Digits are stored in ECD.
TL2A-G	-	-	-	-	-	Operational test line number. Digits are stored in ECF.
TEI	-	-	-	-	-	= 1 Entry exists.
SYN	TCTANI	SYN	3505-1	-	42	= 0 Non-synchronous operational test. = 1 Synchronous operational test.
OPT	TCTANI	OPTN	3505-1	-	35-41	= 1 Operational test provided.
PBT	TOTANI	PBTN	3505-1	-	28-34	= 1 Permanent busy test provided.
APT	TOTANI	APT	3505-1	-	24	Automatic progression test code. = 0 No test is to be performed. = 1 Permanent busy test. = 2 Operational, synchronous test. = 3 Operational, non-synchronous test.
ACI	-	-	-	-	-	Area code index for NPA's. Addresses words 1-3 of this table.

## 4. TOTANIXI in from trunk group data table [See Figure 120].



FIGURE 13 SELECTION STATUS BLOCKS



## NOTES:

1. The Selection Status Block Index (SSBI) & GPS are from the Group Table (Fig. 12). See also Fig. 1A, para. 2B
2. The maximum number of words is determined as follows:
  - a) There may be a maximum of 8 words in each PBI/BLNG status block depending upon the number of aeshers in each group. One PBI/BLNG status block is required for each PBI/BLNG. There may be a maximum of 64 PBI/BLNG. Therefore, there may be a maximum of 512 words in the PBI/BLNG status blocks.
  - b) There may be a maximum of 12 words in each trunk and service circuit status block depending upon the number of aeshers in each group. One status block is required for each trunk or service circuit group. There may be a maximum of 192 trunk and service circuit groups. Therefore there may be a maximum of 2304 words in the trunk and service circuit status blocks.

2816 WORDS MAXIMUM (NOTE 2)

FIGURE 13A SELECTION STATUS BLOCKS - HTI ENTRY

WCD	0	1	0	1	0	1	1	1	1	1	0	0	0	0	0	0	1	
	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0		
1	NUMBER OF PEI/HING STATUS WORDS - 1																	0
15	OR ZERO																	43
1	TS ADDRESS OF PEI/HING STATUS BLOCKS																	0
2																		0
3	0	1	0	1	0	1	1	1	1	1	0	0	0	0	0	0	0	
	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0		
4	NUMBER OF SERVICE CIRCUIT STATUS WORDS - 1																	1
15	OR ZERO																	43
4	TS ADDRESS OF SERVICE CIRCUIT STATUS BLOCKS																	0
5																		0
6	1	0	1	0	1	1	1	1	1	0	0	0	0	0	0	0	0	
	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0		
7	NUMBER OF TRUNK CIRCUIT STATUS WORDS - 1																	1
15	OR ZERO																	43
7	TS ADDRESS OF TRUNK CIRCUIT STATUS BLOCKS																	0
8																		0
9	0	1	0	1	0	1	1	1	1	0	0	0	0	0	0	0	0	
	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0		
10	NUMBER OF TRUNK CIRCUIT STATUS WORDS - 1																	1
15	OR ZERO																	43
10	TS ADDRESS OF TRUNK CIRCUIT STATUS BLOCKS																	0
11																		0

FIGURE 13E SELECTION STATUS BLOCKS - PER/HUNG STATUS BLOCK  
1E

WORD	DATA	DESCRIPTION
0	ACB // SH RMB	RMB STATUS
1	15	GROUP PIG COUNT
2	15	GROUP USAGE COUNT
3	15	OVERFLW COUNT
4	15	SELECTION STATUS BITS (MEMBERS 0 TO 15)
5	15	SELECTION STATUS BITS (MEMBERS 16 TO 31)
6	15	SELECTION STATUS BITS (MEMBERS 32 TO 47)
7	15	SELECTION STATUS BITS (MEMBERS 48 TO 63)

## NOTES:

## 1. DATA DESCRIPTION

WORD	DATA	DESCRIPTION
	ACB	ALL Circuits Busy. If ACB = 1, then all circuits are busy.
	RMB	Status of Night Make Easy key.
0	RMB	Remote Make Easy keys.
	SH	Status of Stop Hunt key.

FIGURE 13 C SELECTION STATUS BLOCKS - SERVICE CIRCUITS, 2 WAY AND CUTTING TRUNK CIRCUITS

WORD	ACB WIS	MAINT BUSY COUNTER	LAST CRT IDLE	
0	15  14 13	7 6	0	
1	15	GROUP SIG COUNT	0	
2	15	GROUP USAGE COUNT	0	
3	15	CYCLEPLC COUNT	0	
4	15	CIRCUITS SELECTION STATUS BITS (CKTS 0 TO 15)	0	
5	15	CIRCUITS SELECTION STATUS BITS (CKTS 16 TO 31)	0	OPTIONAL,
6	15	CIRCUITS SELECTION STATUS BITS (CKTS 32 TO 47)	0	DEPENDENT
7	15	CIRCUITS SELECTION STATUS BITS (CKTS 48 TO 63)	0	ON
8	15		0	HIGHEST
9	15		0	NUMBER
10	15		0	NUMBER
11	15	CIRCUITS SELECTION STATUS BITS (CKTS 112 TO 127)	0	

## NOTES:

## 1. DATA DESCRIPTION

WORD	DATA	DESCRIPTION
0	ACB	All Circuits Busy. If ACB = 1, then all circuits are busy.
0	WIS	Not In Service. If WIS = 1, then group is not in service.

FIGURE 131 SELECTION STATUS BLOCKS - INCOMING TRUNK CIRCUITS  
15

WORD 0	//////////	MAINT BUSY COUNTERS	//////////
	//////////13	7	//////////
	GRAND PEG COUNT		
115			0
	GRAND USAGE COUNT		
215			0
	TRUNK SWITCHE PEG COUNT		
315			0
	CIRCUITS SELECTION STATUS BITS		
415		(CK1 0 TO 15)	0
	CIRCUITS SELECTION STATUS BITS		
515		(CK1 16 TO 31)	0
	CIRCUITS SELECTION STATUS BITS		
615		(CK1 32 TO 47)	0
	CIRCUITS SELECTION STATUS BITS		
715		(CK1 48 TO 63)	0
	CIRCUITS SELECTION STATUS BITS		
815		(CK1 64 TO 79)	0
	CIRCUITS SELECTION STATUS BITS		
915		(CK1 80 TO 95)	0
	CIRCUITS SELECTION STATUS BITS		
1015		(CK1 96 TO 111)	0
	CIRCUITS SELECTION STATUS BITS		
1115		(CK1 112 TO 127)	0

OPTIONAL,  
DEPENDENT  
ON  
HIGHEST  
NUMBER  
NUMBER

FIGURE 14 THREE PORT STATUS BITS

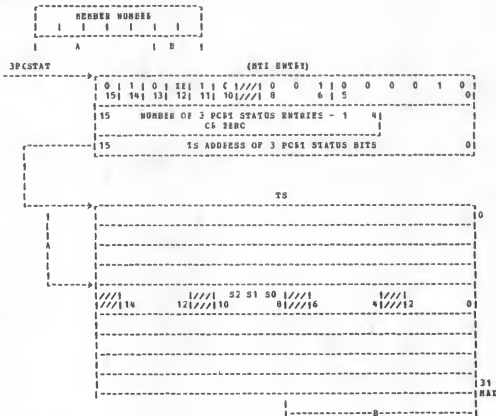


FIGURE 15 MEMBER LISTS

MEMLIST RTI ENTRY (FIG. 15A)

3 \* A  
(NOTE 1)

GROUP NUMBER					
17	1	615	1	1	0
A			B		

## NOTES:

1. The Member List Index (MLI) is from the Group Table (FIG. 12). See also FIG. 1A, para. 1E.

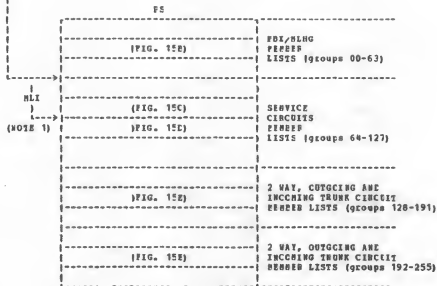


FIGURE 15A HEADER LISTS - RTI ENTRY

WORD 0	0 1 0 1 0 1 X 1 0 1 0 0 0 1 0 0 0 0 0 0 0	
	15 14 13 12 11 10 9 8 7 6 5 4 3 2 1 0	
1 15	NUMBER OF PEI/RING HEADER LIST WORDS - 1 OR ZERO	4 3 0 PEI/RING
2 15	PS ADDRESS OF PEI/RING HEADER LISTS	0
3 15	0 1 0 1 0 1 1 0 1 0 0 0 1 0 0 0 0 0 0 0	
	15 14 13 12 11 10 9 8 7 6 5 4 3 2 1 0	
4 15	NUMBER OF SVC CRT HEADER LIST WORDS - 1	4 3 0 SERVICE CIRCUITS
5 15	PS ADDRESS OF SERVICE CIRCUIT HEADER LISTS	0
6 15	0 1 0 1 0 1 1 0 1 0 0 0 1 0 0 0 0 0 0 0	
	15 14 13 12 11 10 9 8 7 6 5 4 3 2 1 0	
7 15	NUMBER OF TRUNK CIRCUIT HEADER LIST WORDS - 1	4 3 0 TRUNK CIRCUITS
8 15	PS ADDRESS OF TRUNK CIRCUIT HEADER LISTS	0
9 15	0 1 0 1 0 1 X 1 0 1 0 0 0 1 0 0 0 0 0 0 0	
	15 14 13 12 11 10 9 8 7 6 5 4 3 2 1 0	
10 15	NUMBER OF TRUNK CIRCUIT HEADER LIST WORDS - 1 OF 22FC	4 3 0 TRUNK CIRCUITS
11 15	PS ADDRESS OF TRUNK CIRCUIT HEADER LISTS	0









FIGURE 15E TRUNK CIRCUIT MEMBER LIST (FORMAT "11")

		1	1	NUMBER OF MEMBERS	7	6	NUMBER OF SPARES		
		15	14	13 (INCLUDING SPARES)				0	
				/////////////////12			SEB (TRK 0)	0	
				CTTCODE	1		DTA (TRK 0)	0	
		15		11	10			0	
				/////////////////12			SEB (TRK 1)	0	
				CTTCODE	1		DTA (TRK 1)	0	
		15		11	10			0	
				/////////////////12			SEB (TRK 2)	0	
				CTTCODE	1		DTA (TRK 2)	0	
		15		11	10			0	
				/////////////////12			SEB (TRK 3)	0	
				CTTCODE	1		DTA (TRK 3)	0	
		15		11	10			0	
				/////////////////12			SEB (TRK 4)	0	
				CTTCODE	1		DTA (TRK 4)	0	
		15		11	10			0	
				SPARE					

## NOTES:

## 1. DATA DESCRIPTION

DATA	DESCRIPTION
BNB	Remote Make Busy key effecting this number (Max. of 7 BNB keys per group)
TEN	Terminal Equipment Number
DTA	Distributor Triplet Address
SPN	Scan Point Number
SVCNBS	Service Circuit Number SPN for Service Circuits: SPN bits (7-0) = SVCNBS SPN bits (12-8) = 0
CKTCOE	Circuit Code (See Fig. 12C, Note 2 & 12D, Note 2 for numbers)



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ROUTING AND SCREENING TABLES

INDEX OF FIGURES

Figure 16 - 3-Digit Translations and 10DD (Country Code Table) Translator  
Figure 17 - Screening Tables  
Figure 18 - Route Index Expansion  
Figure 19 - Charge Index Information  
Figure 20 - 1-Digit Translation

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FIGURE 16 THREE DIGIT TRANSLATION (continued)

FROM TABLE		LOCAL OF FOREIGN AREA TRANSLATION (NOTE 3) (PS)	
A MINUS 100			0
NOTE 1		CCODE INDEX (B=1)	CCODE INDEX (B=0)
			399

FROM TABLE		SEARCH TABLE - LOCAL OF FOREIGN AREA TRANSLATION (PS)	
NOTE 2			0
		0 0 0 0 0 0 C   $(100 + C1 + 10 + D2 + D3) - 200$	
			CODE INDEX
		1	1
			254
			CODE INDEX
			255 MAX.

FIGURE 16 THREE DIGIT TRANSLATION (continued)

## NOTES:

1. Dialed 11X Codes are converted to 111.
2. If a 3 digit match is not found, then the code index located in the last entry is used.
3. The local area translator is usually a full translator and not a search table.
4. PAT 0 is always required.
5. DATA CROSS-REFERENCE AND DESCRIPTION

DATA	INPUT MESSAGE		ISS FORM			DESCRIPTION
	KEYWCB	KEYWCB	KEYWCB	KEYWCB	KEYWCB	
CODE INDEX	BC:DIG	CCI	3300-1	-	24-26	Code Index
			3300-2	-	27-29	



FIGURE 16A (continued)

CODE INDEX EXPANSION (continued)					
15	0 PREFIX CODE INDEX	1 1019	SCB TEL	1 413	TYPE = 3 01
15	1 PREFIX CODE INDEX	1 817	DIRECT ROUTE INDEX 01		
////////////////////		PEG COUNTER	1	TYPE = 7	
////////////////////		NUMBER	1		
////////////////////		CODE INDEX		01	
////////////////////		17			
////////////////////				TYPE = 5	
////////////////////					
////////////////////				FAT	
////////////////////				1	01
////////////////////				TYPE = 6	
////////////////////					
15	AREA CODE INDEX	1 817	OFFICE CODE INDEX		01511 HAZ.

## NOTES:

1. Entries pointed to by "0" prefix code indexes must be defined in the first 64 entries. The following code indexes must be defined in each office:

0 - Vacant Code treatment  
1 - "Dial 0" Operator treatment

2. "0" Prefix Code Indexes need not be defined if "0+" is not allowed for this office.

(continued)

FIGURE 16A (continued)

## NOTES (continued):

## 3. DATA CROSS-REFERENCE AND DESCRIPTION

DATA	INPUT MESSAGE	ESE F00E				DESCRIPTION
		KEYWORD	NUMBER	ITEM	COLUMN	
SCR TBL	RC:CDI	SCRIE1	3304-1	-	36-37	Screening table number
TYPE	RC:CDI	ETYP	3304-1	-	20	Identifies Code Index Entry: 0 - Vacant entry 1 - Ignore any prefixing 2 - "1" prefix normally received. Code indexes are provided to allow or to deny a "0" prefix or a "no" prefix. 3 - Normally no prefix is received. Code indexes are provided to allow or to deny a "0" prefix or a "1" prefix. 4 - Ignore a "1" prefix. A code index is provided to allow or to deny a "0" prefix. 5 - Foreign Area Transiation required on next 3 digits. 6 - Conflict between Area code and office code. 7 - Preroute peg count desired.
DIRECT ROUTE INDEX	RC:CDI	RTI	3304-1	-	39-41	Direct route index
0 PREFIX CODE INDEX	RC:CDI	POCI	3304-1	-	27-29	0 Prefix code index (normal)
NO PREFIX CODE INDEX	RC:CDI	NPCI	3304-1	-	21-23	No prefix code index (normal)
1 PREFIX CODE INDEX	RC:CDI	PCI	3304-1	-	24-26	1 Prefix code index (normal)
PRG COUNTER NUMBER	RC:CDI	PRC	3304-1	-	42	Preroute peg counter
CODE INDEX	RC:CDI	CDI	3304-1	-	17-19	Code index
FAT	RC:CDI	FAT	3304-1	-	38	Foreign area transistor (0 = local; 1-3 = foreign)
AREA CODE INDEX	RC:CDI	ACDI	3304-1	-	30-32	Area code index (conflict)
OFFICE CODE INDEX	RC:CDI	OCDI	3304-1	-	33-35	Office code index (conflict)

FIGURE 16E COUNTRY CODE TABLE

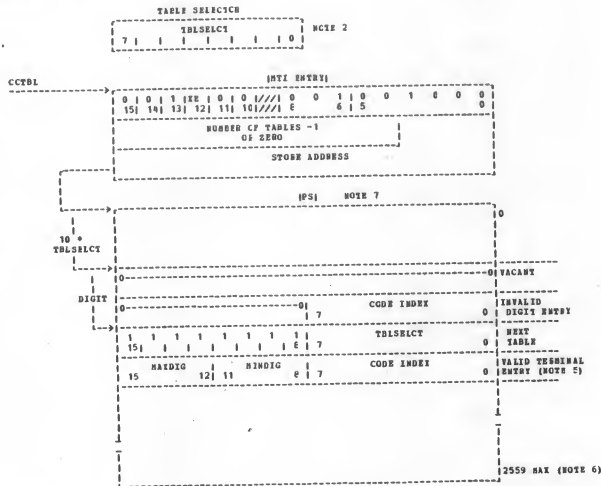


FIGURE 162 (continued) COUNTRY CODE TABLE

## NOTES:

1. TABLE SELECT - Table number to SELECT the next table.
2. The first digit of the Country Access Codes (CAC) is used with TABLE SELECT = 1. After that, TABLE SELECT comes from previous digit. (See Note 6)
3. MAXDIG - MAXimum number of DIGits dialed for country code.
4. MINDIG - MINimum number of DIGits dialed for country code.
5. If the number of digits are exact for a country code, then MAXDIG equals MINDIG.
6. Current assignments require approx. 28 tables, 280 words.
7. The translator exists regardless of whether IDDD screening is done or not. Without IDDD screening, only one table of 10 words is in the translator. With IDDD screening the translator is at its full size. Table zero contains different data in each case. The Table 0 Digit 0 entry is used in routing to the error return when IDDD screening is not done. With IDDD, Table 0 Digit 0 entry is used in routing operator calls (010), and Table 0 Digit 1 entry is used to access Table 1 (TABLE SELECT = 1).

WITHOUT IDDD

TABLE 0

1 CDI	0 ERROR TABLE NAME
00000000	00000000
NO IDDD INDICATION	
(EMPTY)	
9	

WITH IDDD

TABLE 0

1 CDI	0
010 ---->	11111111
011, 01X ---->	00000000
(EMPTY)	
9	

TABLE 1

CAC 1ST DIGIT

1	
2	
3	
4	
5	
6	
7	
8	
9	

010 = equivalent of 0- calls  
 011 = equivalent of 0+ calls (followed by CAC)  
 01X = equivalent of 1+ calls (X = 1st digit of CAC)

FIGURE 17 SCREENING TABLES

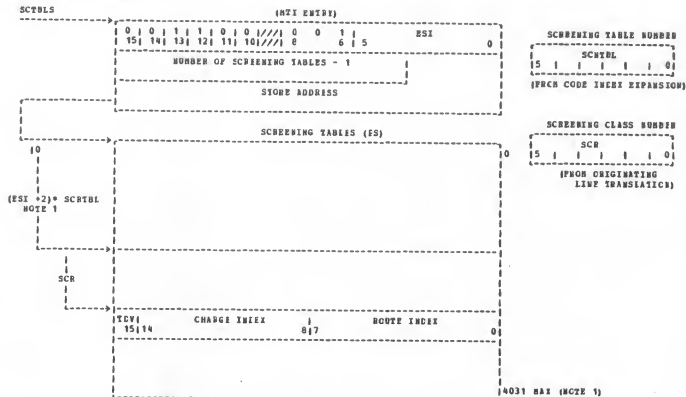




FIGURE 17 SCREENING TABLES (continued)

## NOTES:

1. Maximum screening table size is 63. All screening tables must be the same size. A screening class of 63 indicates that no screening is to be performed, and is not entered in the screening table. Maximum size is therefore 64 tables \* 63 entries = 4032.
2. ESI = Entry size indicator (from word 0 of RTI entry). See Fig. 1 for details.
3. DATA CROSS-REFERENCE AND DESCRIPTION

DATA	INFO MESSAGE		ESS FORM			DESCRIPTION
	KEYWORD	NUMBER	ITEM	COLUMN		
TEV	BC:SCB	TD	3201-1	-	28, etc	Full diversion (RING only)
CHARGE INDEX	BC:SCB	EBI	3201-1	-	23-24	Charge index
ROUTE INDEX	BC:SCB	RTI	3201-1	-	25-27	Route index



FIGURE 18 (continued)

## ROUTE INDEX EXPANSION (continued)

15	TABLE	11110	ENTRY	413	TYPE = 6	0
	DEST = 8	DIGIT	8	////////////////////		
	////////////////////					TYPE = 6
	DEST = 8	FREE TN	CL	TRUNK GROUP NUMBER		0511 MAX.
15	11	10	9	4	8	17

## CODE

CONVERSION	E0	E1	E2	E3	E4	E5	E6	E7
15	12	11	8	7	4	3	0	
								////////////////////

## NOTES:

1. APP = 1 - Alternate Route Index provided.
2. CERI = 1 - Cutover route index present.
3. TYPE = 0 Unassigned
  - = 1 Intraoffice (ROUTE INDEX = NOC)
  - = 2 10 digit interoffice (no overlap outpulsing)
  - = 3 10 digit interoffice (overlap outpulsing permitted)
  - = 4 7 digit interoffice (no overlap outpulsing)
  - = 5 7 digit interoffice (overlap outpulsing permitted)
  - = 6 Destination determined by the "DEST" code in the route index expansion entry.
  - = 7 Interoffice (outpulse received digits)

(continued)

## FIGURE 16 (continued) ROUTE INDEX EXPANSION

## NOTES (continued)

4. CL = 1 - Class of service tone to recording completing operator.

## 5. DEST - Destination code:

- 0 - Vacant circuit group
- 1 - Vacant code operator - no outpulsing trunk group (connect trunk after timeout on received digits) cut thru based on FREE bit or answer supervision received
- 2 - Recording completing operator - No outpulsing trunk group - (connect trunk immediately) cut thru based on FREE bit or answer supervision received.
- 3 - Tones which timeout
- 4 - Tones with no timeout
- 5 - Announcement local
- 6 - Route to reorder
- 7 - Station ringer test
- 8 - Convert dialed digits to a 4, 5, 6 or 7 digit number
- 9 - Balance test line
- 10 - Interrupted milliwatt test line
- 11 - Synchronous test line
- 12 - Loop around test line 0
- 13 - Loop around test line 1
- 14 - Short circuit test line
- 15 - Open circuit test line
- 16 - Charge test line
- 17 - Continuous milliwatt test line
- 18 - AC/DC open circuit test line
- 19 - Space
- 20 - Autoconnect
- 21 - RTIL input terminal

## 6. Assigned Route Indexes

<u>Route Index</u>	<u>Description</u>
8	Discontinued or changed number
9	Trouble intercept
10	Blank 4-digit number & unassigned number
11	Manual line
12	Denying custom calling services
13	Permanent signal announcement
14	Permanent signal tone
15	Permanent signal operator (non-ccin)
16	Permanent signal operator (coin)
17	Partial dial announcement
18	Invalid 10-digit translation error
19	Auto-connect busy tone
20	Auto-connect high tone
21-31	Reserved

(continued)

FIGURE 18 (continued) ROUTE INDEX EXPANSION

## NOTES (continued):

7. ICF\_RTI = The Route Index to be used when a line is assigned to intercept by Recent Change. If not specified (i.e., ICF\_RTI = 0), RI = 8 will be assumed by the program.
8. DATA CROSS-REFERENCE AND DESCRIPTION

DATA	INPUT MESSAGE	ESS FORM			DESCRIPTION
		KEYWORD	NUMBER	ITEM	COLUMN
CUTOVER ROUTE INDEX	RC:RTI	CRTI	3303-1	-	23-25 Cutover route index
OTO-TEST-RI	RC:RTI	ORTI	3303-1	-	26-28 Office to office test route index
PREFIX DIGIT	RC:RTI	PPX	3303-2	-	26-28 Prefix digit
DLT	RC:RTI	DLT	3303-2	-	25 Number of digits to delete (1-7, but not all)
FBEE	RC:RTI	FREE	3303-2	-	36 Free calls; no charge over this route
DC-DS	RC:RTI	DIGIT	3303-2		29-32 Conversion digits - stored in BCD
DIGCM	RC:RTI	DIG	3303-2		29-32 Conversion digits count
TN	RC:RTI	STONE	3303-2	37	Tone (when CI = 1) TN = 0 - use Low Tone TN = 1 - Use High Tone

FIGURE 18A ALTERNATE ROUTE INDEX EXPANSION



FIGURE 19 CHARGE INDEX INFORMATION

CHARGE TABLE (MII ENTRY)

CHARGE INDEX (NOTE 2)

0	1	1	1	0
---	---	---	---	---

CHARGE	TYPE	COEFFICIENT				INITIAL			
0	0	1	0	0	0	0	1	0	0
15	14	13	12	11	10	9	8	7	6
0	1								
1	0								
0	0								

SEE TABLE ON NEXT PAGE USING  
ENTIRE CHARGE INDEX

## NOTES:

## 1. DATA CROSS-REFERENCE AND DESCRIPTION

DATA	INPUT MESSAGE		ESS FORM			DESCRIPTION
	RC:CHI	TYPE	NUMBER	ITEM	CLONE	
TYPE	RC:CHI	TYPE	3302	-	19-20	Charge index entry number = 00 vacant entry = 01 coin entry (CN) = 10 message rate entry (NR)
INITIAL TIME	RC:CHI	ITM	3302	-	21	Initial time = 0 local untimed call = 1 to 7 minutes - local timed coin or timed NR call
INITIAL CHARGE	RC:CHI	ICU	3302	-	22-23	Initial charge units = 0 - fixed initial charge determined by coin phone (5-45¢) = 1 to 15 message units - timed or untimed NR
OVERTIME TIME	RC:CHI	OTH	3302	-	24	Overtime = 1 to 7 minutes - local timed coin or timed NR call
OVERTIME CHARGE	RC:CHI	OCU	3302	-	25-26	Overtime charge units = 0 - coin overtime charge in 5¢ = 1 to 15 message units - NR

CHARGE INDEX INFORMATION FOR FIGURE 19  
(SEE NOTE 2)

CHARGE INDEX	BILLING TYPE		
0	Illegal		
1	Free		
2	ANA - WATS Band 0	Special	
3	ANA - WATS Band 1	Interstate	
4	ANA - WATS Band 2	Interstate	
5	ANA - WATS Band 3	Interstate	
6	ANA - WATS Band 4	Interstate	
7	ANA - WATS Band 5	Interstate	
8	ANA - WATS Band 6	Special	
9	ANA - WATS Band 7	Interstate	
10	ANA - WATS Band 8	Intrastate	
11	ANA - WATS Band 9	Intrastate	
12	ANA - USSF		
13	ANA - Reserved		
14	ANA - Unused		
15	ANA - Toll call		
CHARGE INDEX	ANA IN OFFICE AND NOT A COIN CALL	(1) CCIN CALL (2) SOFTWARE H.R. (3) HARDWARE H.R.	
16	ANA WITH NBI 0		
17	ANA WITH NBI 1		
18	ANA WITH NBI 2	USE	
19	ANA WITH NBI 3		
20	ANA WITH NBI 4	CHARGE	
21	ANA WITH NBI 5		
22	ANA WITH NBI 6	FOR CCIN	
23	ANA WITH NBI 7		
24	ANA WITH NBI 8	CHARGE AND	
25	ANA WITH NBI 9		
26	ANA WITH NBI 10	MESSAGE RATE	
27	ANA WITH NBI 11		
28	ANA WITH NBI 12	EGGING	
29	ANA WITH NBI 13		
30	ANA WITH NBI 14		
31	ANA WITH NBI 15		

## NOTES: (continued)

- When an office has ANA for message rate calls, an NBI (Message Billing Index) is used and the CHARGE is used if there is also a hardware message register to be pegged.



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FIGURE 15A INITIAL CHARGE

INTCHG

(PIL ENIST)



NOTES:

1. ITLCHG = Increment on initial charge for Hotel-Hotel hardware message registers.



FIGURE 20 (continued) ONE DIGIT TRANSLATION

NOTES (continued)

- 2. TYPE = 0 Error, Invalid digit  
Auxinfo = 0 (in program, route index of 16 is supplied).
- = 1 Inconclusive:  
Auxinfo = Table selector number for another table to be used in translating the next digit.  
NEE = 0
- = 2 Locally terminating call  
Auxinfo = Morsecode office code (MOC).
- = 3 Tandem call  
Auxinfo = Route index



MISCELLANEOUS AND DIAGNOSTIC INFORMATION

LIST OF FIGURES

- Figure 21 - ICC Translation
- Figure 22 - MCC & RFA Conversion Table
- Figure 23 - Miscellaneous Office Parameters
- Figure 24 - RFA Buffer Table
- Figure 25 - Automatic Line Insulation Test
- Figure 26 - Maintenance Information
- Figure 27 - Freecutover Translation Table
- Figure 28 - Autoconnect Translation Table



## NOTES:

## 1. DATA CROSS-REFERENCE AND DESCRIPTION

DATA	INPUT MESSAGE		ESS FORM		DESCRIPTION
	KEYWORD	SUPPLEMENT	INTER	CLASS	
LCC INDEX	BC:LCC	LCC	3306-1	-	17-19 line class code index
ASCII 1 to 3	BC:LCC	LCC	3306-1	-	20-22 3 character line class code used by TELCC's (see Note 2)
PTY	BC:LCC	PTY	3306-1	-	23 Party number
DATE	BC:LCC	DATE	3306-1	-	24 Date class for charging
SCR	BC:LCC	SCR	3306-1	-	29-30 Screening class number
THAJ	BC:LCC	THAJ	3306-1	-	27-28 Terminating major class (See Figure 2C, Note 8)
CNAJ	BC:LCC	CNAJ	3306-1	-	25-26 Originating major class (See Figure 2C, Note 8)

## 2. The following table is used for coding or decoding 8-bit ASCII 117 codes; the eighth bit (parity) is always zero:

117 CHAR	BINARY CODE	117 CHAR	BINARY CODE	117 CHAR	BINARY CODE
A	01000001	H	01001110	0	00110000
B	01000010	C	01001111	1	00110001
C	01000011	P	01010000	2	00110010
D	01000100	Q	01010001	3	00110011
E	01000101	R	01010010	4	00110100
F	01000110	S	01010011	5	00110101
G	01000111	T	01010100	6	00110110
H	01001000	O	01010101	7	00110111
I	01001001	V	01010110	8	00111000
J	01001010	W	01010111	9	00111001
K	01001011	X	01011000		
L	01001100	Y	01011001		
N	01001101	Z	01011010		





FIGURE 22C NPA FOREIGN AREA TABLE

NPAFAT	(NOTE 3)	INTL ENTRY			
1	//////////1	FN0	1	FP0	1
1	//////////11		017	413	FA0
FAT	//////////1				01
NOTE 1	//////////1	FN1	1	FP1	1
1	//////////1				FA1
	//////////1				1
	//////////1	FN2	1	FP2	1
	//////////1				FA2
	//////////1				1
	//////////1	FN3	1	FP3	1
	//////////1				FA3
	//////////1				1

## NOTES:

1. See Figure 16
2. FNn, FFn, FAn - NFA in BCD
3. NPAFAT is only accessed by office records to output NPA on 3300 Form



FIGURE 23E ABA TERMINAL IDENTIFIER

ABATID

421100

A1	A2	A3	A4
A5	A6		

FIGURE 23F NUMBER OF SCREENING CLASSES

SCRSIZE (RTI ENTER)

/////////12	SCRSIZE	0
-------------	---------	---

FIGURE 23F TEST PANEL ASSIGNMENTS

TLTPL (RTI ENTER)

/////////12	TEP1	010
/////////12	TEP2	011

FIGURE 23G NO TEST TENS

NOTEST (RTI ENTER)

/////////12	WTR	010
/////////12	WRO	011
/////////12	CYR	012
/////////12	CYR	013

FIGURE 23H FAR END TEST LINES (RTI)

FETL (RTI ENTER)

/////////12	FTEH1	010
/////////12	FTEH2	011

FIGURE 23I TRUNK UNDER TEST TERMINAL (RTI)

TUTTL (RTI ENTER)

/////////12	TEH	01
-------------	-----	----

FIGURE 23J DIAL TONE DETECTOR ALARM ITA

LYDATA (MTL ENTRY)  
 -----  
 ///////////////10 EDIA 01

## NOTES:

## 1. DATA CROSS-REFERENCE AND DESCRIPTION

DATA	INPUT MESSAGE		ESS FORM			DESCRIPTION
	RC:OFFICE	MSG	NUMBER	ITER	COLUMN	
EPG	RC:OFFICE	DPG	3500-1	20	21-22	Dial Pulse receiver Group 0 = Dial pulse receivers are not provided 1 = Dial pulse receivers are provided
NOT	RC:OFFICE	NCI	3500-1	23	21-22	Negative 130 volts (-130V) 0 = Use +130V for coin collect; use -130V for coin return 1 = Use -130V for coin collect; use +130V for coin return
ZPLUS	RC:OFFICE	ZPLUS	3500-1	21	21-22	ZERO+ dialing 0 = 0+ calls not allowed 1 = 0+ calls allowed
SUP	RC:OFFICE	SUP	3500-1	22	21-22	Superimposed ringing 0 = Office has AC-DC ringing 1 = Office has superimposed ringing
ICF	RC:OFFICE	-	-	-	-	Print CFV Changes 0 = Printing of customer dialed CFV changes not inhibited 1 = Printing of customer dialed CFV changes inhibited
EC	RC:OFFICE	PRECUR	-	-	-	Precut state 1 = Office is in precut state
RV	RC:OFFICE	RVSR911	3500-1	40	21-22	Reverse tip & ring for 911 service 1 = Reverse tip & ring
ANA	RC:OFFICE	ANA	3500-1	36	21-22	Automatic Message Accounting 0 = Office does not have ANA - software message registers may be used 1 = Office has ANA - software message registers are not used.
NAWANA	RC:OFFICE	ISEY	-	-	-	Network Analysis 1 = Perform network analysis 0 = DC NOT perform network analysis

(continued)

## NOTES: (continued)

## 1. DATA CROSS-REFERENCE AND DESCRIPTIONS (continued)

DATA	INPUT MESSAGE [KEYWORD]	ESS FORM			DESCRIPTION
		NUMBER	ITEM	COLUMN	
SLU	RC:OFFICE SLU	-	-	-	Subscriber Line Utilization 0 = Pre-USFF study is not invoked 1 = Pre-USFF study is invoked
TS	RC:OFFICE TSP	-	-	-	Traffic sampling 0 = Traffic sampling is not invoked 1 = Traffic sampling is invoked
CO	RC:OFFICE CNPOSE	-	-	-	Complaint Observing 0 = Complaint observing is not invoked 1 = Complaint observing is invoked
H1 to H14	RC:OFFICE HOLD	3500-2	00	19-32	1 to 14 alpha-numeric office identifier (ASCII code See Figure 21 Note 2)
TEN1	RC:LINE  ETYP	3500-2	-	19	= 32, 1st TEN assigned to TLP1 (access Trk 0)
TEN2	RC:LINE  ETYP	3500-2	-	19	= 33, 2nd TEN assigned to TLP1 (access Trk 1)
WTNE	RC:OE  ETYP	3500-2	-	19	= 2, Notest wire test multiple - even TEN
WTNO	RC:OE  ETYP	3500-2	-	19	= 3, Notest wire test multiple - odd TEN
CTNE	RC:OE  ETYP	3500-2	-	19	= 4, Notest circuit test multiple - even TEN
CTNO	RC:OE  ETYP	3500-2	-	19	= 5, Notest circuit test multiple - odd TEN
A1 to A6	RC:OFFICE ANALD	3500-2	05	19-26	Eight character identification number (BCD code)

## NOTES: (continued)

## 2. DATA DESCRIPTION

DATA	DESCRIPTION
HIT	0 = HIT timing not active (Note 4) 1 = Do HIT timing on IP incoming trunks
ICS	(0,1) = Set the default for the CSL1 & CSL2 keyboards on BC:LINE 6 BC:NTL to (yes,no) (Note 4)
h1 10 #6	Six character identification number (ASCII Code - see Fig. 21, Note 2)
SCRSIZE	Number of screening classes provided

NOTES: (continued)

## 2. DATA DESCRIPTION

DATA	DESCRIPTION
ITEM1	1st terminal equipment number assigned to BOTL 105 test lines
ITEM2	2nd terminal equipment number assigned to FCTL 105 test lines
ITEM	Terminal equipment number assigned to FCTL trunk under test terminal
EDTA	Distributor triplet address for dial tone detector alarm

## 3. ASSIGNED SCAN POINT NUMBERS

SCAN POINT NUMBER	SFN ICR
10,19,14	False cross and ground circuit 0
10,20,14	Power cross circuit 0
10,21,12	False cross and ground wire 0
10,22,12	Power cross wire 0
10,23,10	False cross and ground circuit 1
10,24,10	Power cross circuit 1
10,25,00	False cross and ground wire 1
10,27,07	Power cross wire 1
10,21,14	Ringing & tone plant interrupter test 0
10,27,11	Ringing & tone plant interrupter test 1

## 4. Bit may be set or reset by using "SET" or "RESET" keyword in SC:OFFICE.

(continued)

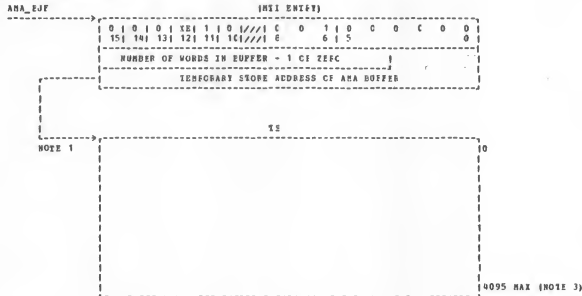
NOTES: (continued)

## 5. ASSIGNED DISTRIBUTOR TRIPLIET ADDRESSES

TEST TRIPLIET ADDRESS	DISTRIBUTOR TRIPLIET ADDRESS FOR:	DIST TRIPLIET ADDRESS	DISTRIBUTOR TRIPLIET ADDRESS FOR:
(13,0,254)	Circuit test vertical points	(10,0,006)	Trunk & line test panel triplet address No. 0
(13,1,254)	Circuit test vertical points	(1,0,006)	Trunk & line test panel triplet address No. 1
(3,0,252)	Wire test vertical points	(2,0,006)	Trunk & line test panel triplet address No. 2
(3,1,252)	Wire test vertical points	(3,0,006)	Trunk & line test panel triplet address No. 3
(10,0,255)	Circuit test multiple even/odd select	(0,0,007)	Trunk & line test panel triplet address No. 4
(10,0,253)	Wire test multiple even/odd select	(0,0,224)	Beep recording announcement circuit
(11,0,255)	Circuit test multiple test circuit point	(1,0,031)	Battery boost DTA for Network Frame 1
(1,0,253)	Wire test multiple test circuit point	(1,0,047)	Battery boost DTA for Network Frame 2
(0,0,250)	Interrupter circuit for RT	(1,0,063)	Battery boost DTA for Network Frame 3
(0,0,248)	Interrupter circuit for RT	(1,0,079)	Battery boost DTA for Network Frame 4
(1,0,250)	GBT tree for RT	(1,0,055)	Battery boost DTA for Network Frame 5
(2,0,250)	Marginal check circuits for RT	(1,0,111)	Battery boost DTA for Network Frame 6
(1,0,240)	Activate RT	(1,0,127)	Battery boost DTA for Network Frame 7
(2,0,240)	Overload announcement circuit for RT	(1,1,015)	Battery boost DTA for Network Frame 8
(13,0,240)	+24 volt power alarm test	(1,1,031)	Battery boost DTA for Network Frame 9
(3,0,255)	+3 volt power alarm test for CPO	(1,1,047)	Battery boost DTA for Network Frame 10
(13,0,253)	100S lamps for CPO	(1,1,063)	Battery boost DTA for Network Frame 11
(3,0,250)	Ringling & tone plant CCS lamps	(1,1,079)	Battery boost DTA for Network Frame 12
(3,1,255)	+3 volt power alarm test for CFI	(1,1,095)	Battery boost DTA for Network Frame 13
(13,1,253)	100S lamps for CFI	(1,1,111)	Battery boost DTA for Network Frame 14
		(1,1,127)	Battery boost DTA for Network Frame 15



FIGURE 24 ANA BUFFER TABLE



## NOTES:

1. The ANA buffer has 3 basic entries - Initial, Answer and Disconnect - With a number of other entries. The entries are byte oriented and need not start on a word boundary. The buffer is only accessed for data by the ANA programs.
2. XI = 1 if ANA in OFF\_DATA = 1
3. The size is fixed at 2800 words based on current fixed engineering rules, except when initially testing ANA capability in an existing office with Software Message Registers, in which case the size may be smaller (typically 100 words).
4. On the initial run of an office either the office will have the ANA buffer allocated or the Software Message Registers allocated, but not both.

FIGURE 25 AUTOMATIC LINE INSULATION TEST

ALITWRD

(MII ENTRY)

```

////////////////////////////////////////////////////FERF|TRG|SRG|/////1  ENG
//6|5|4|/////2|1|0

```

## NOTES:

## 1. DATA CROSS-REFERENCE AND DESCRIPTION

DATA	INPUT MESSAGE	ESS FORM			DESCRIPTION
	(KEY) (CODE)	(NUMBER) (ITEM) (COLUMN)			
FERF	RC:OFFICE RCODE	3500-1	30	22	Foreign ERF test in ALIT (Mode = 4)
TRG	RC:OFFICE RCODE	3500-1	30	22	Tip & ring to ground test in ALIT (Mode = 2)
SRG	RC:OFFICE RCODE	3500-1	30	22	Short or ring to ground test in ALIT (Mode = 1)
ENG	RC:OFFICE BANGE	3500-1	29	22	Range for leakage resistance between lines
					1 = 80k ohms
					2 = 320k ohms
					4 = 2.56 megohms

PA-3H303

SECTION 700

# FIGURE 26 MAINTENANCE INFORMATION

## FIGURE 26A JUNCTION CIRCUITS

JCT\_RATE (M1 ENTRY)

1	JCTNC	1
12	1	0

## FIGURE 26B SERVICE CIRCUITS

SVC\_RATE (M1 ENTRY)

1	SVCNC	1
12	1	0

## FIGURE 26C TRUNK CIRCUITS

TRK\_RATE (M1 ENTRY)

1	TRKNC	1
12	1	0

### NOTES:

#### 1. DATA CROSS-REFERENCE AND DESCRIPTION

DATA	INPUT MESSAGE	ESS FORM	DESCRIPTION
	RETNODE	NUMBER/ITEM/COLUMN	
JCTNO	RC:OFFICE JC	3500-1 26 22	Diagnostic rate for junction circuits
SVCNO	RC:OFFICE SVC	3500-1 27 22	Diagnostic rate for service circuits
TRKNO	RC:OFFICE TRK	3500-1 28 22	Diagnostic rate for trunk circuits

#### 2. Values for JCTNO, SVCNO & TRKNC

- 000 = Invalid (can't do all)
- 001 = One-half of circuits diagnosed each day
- 010 = One-quarter of circuits diagnosed each day
- 011 = One-eighth of circuits diagnosed each day
- 100 = One-sixteenth of circuits diagnosed each day
- 101 = One thirty-second of circuits diagnosed each day

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FIGURE 28B CALLBACK NUMBER TRANSLATION (continued)

PAGE PREVIOUS PAGE

7 \* BII

CA	TIMECODE	ADDITIONAL	ITC	ITP	WORDS 0 6 1 WHEN
1514	1 1 1	01 7	14	211	0
MSGCL	ICNE	NDU	FUNCTION	EFIORIIV	FUNCTION = 0,3
15	11110	91 8 17	= 0,3	413	0 (SEE DEICW)
TERMINAL EQUIPMENT NUMBER					
12	1	1	1	1	0
D0	D1	D2	D3		
D4	D5	D6	D7		
D8	D9	D10	D11		
D12	D13	D14	SIGDIG		
NOTE 3					
CA	TIMECODE	ADDITIONAL	ITC	ITP	WORDS 0 6 1 (ABOVE)
15	11110	91 8 17	= 0,3	413	0 WHEN FUNCTION = 8
FUNCTION = 8					

(continued)

FIGURE 268 (continued) CALLBACK NUMBER TRANSIATIC

```

CA///////////////////////////////////////////////////
15/////////////////////////////////////////////////// WORDS 0 6 1 (ABOVE)
///////////////////////////////////////////////////
/////////////////////////////////////////////////// TONE /////////////////////////////////////////////////// FUNCTION /////////////////////////////////////////////////// WHEN FUNCTION = 9
/////////////////////////////////////////////////// 10 9//17 9 1//17 1//17

```

```

CA/////////////////////////////////////////////////// 18AC1//1 DEF 1//17
15/////////////////////////////////////////////////// 6 1//14 2//17 WORDS 0 6 1 (ABOVE)
///////////////////////////////////////////////////
/////////////////////////////////////////////////// FUNCTION /////////////////////////////////////////////////// WHEN FUNCTION = 10
/////////////////////////////////////////////////// 7 = 10 1//17

```

## NOTES:

1. MSGC13 is a number inputted via a TTY message. It is the same number as found in the CALLBACK table. (see Note 4)
2. The DED bit in Entry 0 is always set for the maintenance TTY. (see Note 5).
3. The number of entries in the CALLBACK table are autoconnect user limited. The standard autoconnect users are:  
Remote maintenance, traffic, service orders and repair service bureau. There may be other users such as:  
BTI monitor & Western Electric Co.
4. DATA CROSS-REFERENCE AND DESCRIPTIONS

DATA	INPUT MESSAGE		ESS FCN		DESCRIPTION
	KEYWORD	NUMBER	ITEM	CLDR	
AC1, AC2	BC:LINE AC	-	-	-	Automatic autoconnect trigger number 0 = not automatic 1 = automatic
TW1, TW2	BC:LINE TW	3100-1	-	17-23	Autoconnect trigger number (see Fig. 2c, Note 3)
TTY	BC:TTY TTYL	3500-1	-	19	TTY controller number
TIMEOUT	BC:LINE TC	-	-	-	Number of seconds that TTY channel can remain idle waiting for input before automatic disconnect. The timeout time is TIMEOUT = 3 seconds

(continued)



NOTES: (continued)

## 4. DATA CROSS-REFERENCE AND DESCRIPTION

DATA	INFCI MESSAGE		ISS FORM			DESCRIPTION
	RC:LINE	KEY/CBD	NUMBER	ITEM	COLUMN	
MSGCLS	RC:LINE	CLS	-	-	-	Message class number 0 = maintenance 1 = backup maintenance 2 = service orders 3 = traffic 4 = repair service bureau 5 = office records 6 = regional accounting office 7 = spare 8 = ASA primary 9 = ASA backup 10 = SCTI data 11-15 = spare
TIYC	RC:LINE	TIYC	-	-	-	TIY physical controller number
TIYE	RC:LINE	PORT	-	-	-	TIY physical port number
TONE	RC:LINE	TONE	-	-	-	Defines the carrier tone of the data set 03 = high tone (no timing) 01 = 2025 Hz (time 30 sec) 10 = 2225 Hz (time 30 sec)
WDB	RC:LINE	WDB	-	-	-	No dial back 0 = call return number 1 = use dedicated
ADO	RC:LINE	AUTO	-	-	-	Automatic dialing option 0 = feature not desired 1 = feature desired
PRICHTY	RC:LINE	PRIOB	-	-	-	To be used in the event that an incoming trigger number needs any of the existing autoconnect facilities that are in service.
NITE	RC:LINE	NIGHT	-	-	-	Night desk 0 = day LIT 1 = night LIT

(continued)

## NOTES: (continued)

## 4. DATA CBCSS-REFERENCE AND DESCRIPTION

DATA	INPUT MESSAGE	ESS FORM	DESCRIPTION		
	RTTYCDS	NUMBER	ITER	COLUMN	
FUNCTION	RC:LINE	ETYE	-	-	-
					User function 0 = TTY 1 = reserved 2 = reserved 3 = ROTL data 4-7 = spare 8 = local test desk trunk 9 = remote record overload announcement 10 = ROTL security 11-15 = spare
TER	RC:LINE	CE	-	-	-
					Terminal equipment number.
DO TO D14	RC:LINE	RTN	-	-	-
					Callback number in BCD (zero = 1010)
EBR	RC:LINE	TER	-	-	-
					Member number in the trunk group for FUNCTION = 8 RCTL user identity digit for FUNCTION = 10

## 5. DATA DESCRIPTION

DATA	DESCRIPTION
ISA	Miscellaneous AC controller 0 = TTYC is not a miscellaneous AC controller 1 = TTYC is a miscellaneous AC controller
DED	Dedicated AC controller (See Note 2) 0 = TTYC is not a dedicated AC controller 1 = TTYC is a dedicated AC controller
ICA	1 = callback number entry active
SIGDIG	Number of digits in entry
RAMI	RCTL automatic maintenance limit 0 = can remove up to the out of service limit of trunks in a group 1 = can remove more than the out of service limit of trunks in a group

EQUIPMENT AND TRAFFIC INFORMATION

INDEX OF FIGURES

Figure 29 - Office Definition Data  
Figure 30 - Tape Definition Data  
Figure 31 - Store Address  
Figure 32 - Write Protect Table  
Figure 33 - Traffic Data  
Figure 34 - Scan List  
Figure 35 - Growth Parameters

FIGURE 29 OFFICE DEFINITION DATA

FIGURE 25A TTY CONTROLLER PARAMETER BLOCK TABLE

TICPBS 420033

(MTI ENTRY)

1+ [4-PTTC]	//////////////////////1 CPBENT															0
	//////////////////////12 1 1 0															
CONTROLLER PARAMETER BLOCK I/O ADDRESS																
15	413															0
CONTROLLER PARAMETER BLOCK ADDRESS																
CF [NSP]////////////////	CPBACK	1	CPBWRO	1	CPREQ											
1514	11	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
MSGCLS 11////////////////																
15	11															
32 NOTE 1																

FIGURE 29B EQUIPPED I/C CHANNEL

EQIOCHAN

420000

(MTI ENTRY)

CHANNEL NO.	//////////////////////1															0
	19 1 1 1 514 1 1 1 1 0															
IOC=0 [C=0]//////////////// CHB=0																
15	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
IOC=1 [C=0]//////////////// CHB=1																
15	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0

FIGURE 29C EQUIPPED MICROSTORE

EQUIPMENT

[R1] ENTRY

//////////	RC_VER	RCD
	0	0 1 1

NOTES:

. 7 . 6 . 5 . 4 . 3 . 2 . 1 . 0 .

1. There are six possible I/O controllers and 2 spare entries.

2. DATA CROSS-REFERENCE AND DESCRIPTION

DATA	INPUT MESSAGE		ESS FORM			DESCRIPTION
	KEYCODE	NUMBER	ITEM	COLUMN		
NSP	RC:TTY	NS	3500-3	-	2E	1 = I/O controller is arranged for a high speed printer
CP	RC:TTY	PAR	3500-3	-	2F	Parity check 0 = no 1 = yes
CPENOH	RC:TTY	RO	-	-	-	Monitor flags for ports 0-3. Port is used as a monitor port.
CPNRU	RC:TTY	VRU	3500-3	-	26	VRU test flags for ports 0-3. 1 = do VRU test on port.
RC_VER	RC:OFFICE	MICRO	3500-1A	NS	22	The type of IC circuit packs the microstore is equipped with: <u>LDs to SR-1C9 10-02</u> <u>Type of IC packs</u> 0 =      none      4C062 to 65, 66, 69 (S) 1 =      none      4C156 to 159 (E) 2 =      8A, 8E      4C200 to 203 (D) 3 =      8A      4C068, 69 (S) & 4C200, 201 (D) 4 =      8A      4C158, 159, 200, 201 (D) 5-15 (Future)

NOTES: (continued)

## 3. DATA DESCRIPTION

DATA	DESCRIPTION
CPEMW	Number of TTY controller parameter block entries -1
MSGCLS	Message for autococonnect on this TTY controller. See definition in Figure 28, Note 4.
CPIEQ	Equipped flags for ports 0-3. 1 = port equipped.
WSTCHN	Total number of standard equipped main I/C channels (1 or 2)
NCHN	Total number of equipped main I/C channels (1 or 2)
C	Channel 0 = standard channel 1 = special channel
CWE	Channel number
IOC	Address of main channel (3 out of 6 code) (See FIG. 30 Note 5)
MOD	Each bit is an equipped module of microstore. Each mod is 1024 words.



FIGURE 31 STORE ADDRESS

FIGURE 31A

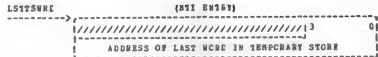


FIGURE 31B

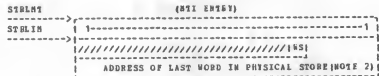
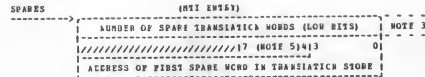


FIGURE 31C



FIGURE 31D



## NOTES:

1. WS = Wide Store  
= 0 For No. 3 ESS
2. This address is the address of the last word in physical store. It may be equal to or larger than the last word of translation store. (See Figure 1, Note 10)
3. The number of spare translation words is: the address of the last word in translation store (see Figure 1, Note 10) minus the address of the first spare word in translation store (see SPARES). This implies that the last word in translation store can never be used.
4. Means spare "translation assignable" temporary store words.
5. Bits 4 to 7 of word 2 (Fig. 31D) are for the number of spare translation words (HIGH BITS). See NOTE 3.



FIGURE 32 WRITE PROTECT TABLE

WPTBL		(BIT EXIST)															
		1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	1
15		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
15		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
15		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
15		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
15		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
15		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0

## NOTES:

1. Map of which 4K store blocks are write protected (16 words allowing 1024K).

0 = Writable store

1 = Write protected

If 4K is not provided, then bit is set

FIGURE 33 TRAFFIC DATA

FIGURE 33A CLASS OF SERVICE

CLSRV	(MTI ENTRY)									
	RAJ3	12	11	RAJ2	6	7	RAJ1	4	3	RAJ0
	15									0
	RAJ7			RAJ6			RAJ5			1
	RAJ11			RAJ10			RAJ9			2
	RAJ15			RAJ14			RAJ13			3
	RAJ19			RAJ18			RAJ17			4
	RAJ23			RAJ22			RAJ21			5
	RAJ27			RAJ26			RAJ25			6
	RAJ31			RAJ30			RAJ29			7

FIGURE 33B INCOMING &amp; INTRAOFFICE INTERCEPT BLOCK

IDBLK	(MTI ENTRY)									
	R11									
	7									
	0									
	R12									
	7									
	0									
	R13									
	7									
	0									

(See NCIES following Figure 33F)

FIGURE 33C NIGHTLY ROUTINE SCHEDULING EIGCB

ESYBLF	(N11 ENTRY)	
		10
	FUNCTION1//////////1 CHAPNG	11
	15 141//////////13 1 1 01	01
		12
		13
		14
		15
		16 NOTE 1

FIGURE 33D TERMINAL USAGE IDENTIFIES

TLOID	(NOTE 7)	(N11 ENTRY)	
			10
	TR=01/////////1	TEN	1
	15 1////////12		01
			1
	TR=11	RESEER NUMBER	1
	15 114	GROUP NUMBER	01
			1
			15

(See NOTES following Figure 33F)

FIGURE 338 SCHEDULE BLOCK

SKEDBLK														(MT) ENTRY)													
NOTE 2																											
														0													
														BUST													
														HOOR													
														END													
HR7	HR6	HR5	HR4	HR3	HR2	HR1	HR0								BUST												
15	14	13	12	11	10	9	8	7	6	5	4	3	2	1													
															HOOR												
HR15	HR14	HR13	HR12	HR11	HR10	HR9	HR8																				
															BEGIN												
HR23	HR22	HR21	HR20	HR19	HR18	HR17	HR16																				
															C												
															SCHEDULE												
															END												
															C												
															SCHEDULE												
															BEGIN												
															WEEKLY												
															SCHEDULE												
															14												

(See NOTES following figure 338)

TRAFD

(MII ENTRY)

NOTE 5

[illegible]

NOTE 3

FIGURE 33 TRAFFIC DATA (continued)

## NOTES:

1. In Figure 33C,  
word references are:

value of FUNCTION set by ODA are:

value of CHANNEL set by ODA are:

0 = Dally	01	0011
1 = Traffic busy hours	01	0011
2 = Message registers	01	0000 (note 6)
3 = Out of service report	01	0000
4 = Set selection status bits	01	0000
5 = Unused	00	0000
6 = Unused	00	0000

2. In Figure 33E, all 5 schedules have the same layout. The weekly schedule shows the beginning time. It ends one half hour later.

3. In Figure 33F, words 7-26 are header words which control the printing of the traffic counts. Of the three fields, NAME and LENGTH are given predefined values by CDA and SCH is given predefined and default values by CDA. The default values are recent changeable by the RC: SCHED message for the header words marked with \*. Following are the values set up by CDA.

WORD	NAME	SCH	LENGTH	TYPE OF COUNTS
7	16**	0	0	Starts table
8	14	0	16	Quarter hour 45 min. ago
9	14	0	16	Quarter hour 30 min. ago
10	14	1	16	Quarter hour 15 min. ago
11	14	0	16	Present Quarter hour
12	1	2	1	Cycle count for busy hour
13	1	3	1	Cycle count for non-busy hour
14	1	4	1	Cycle count for daily
15	1	5	1	Cycle count for weekly
16	2	2*	8f	Office totals
17	3	4	4	Division of revenue
18	4	0	0	Starts the groups' (MLH, SVC, TRS)
19	5	0*	4	counts
20	6	0*	5	Freeroute
21	7	5*	31	Class of service
22	8	5*	3	A-Link usage
23	9	0*	16	E-Link usage
24	15	6	63	Terminal line usage
25	16	0	6	Plant
26	0	0	0	ANA
				Ends table

\*\* indicates start of table, not ANA.

4. This table is searched by the program. (Figure 33H)

(continued)

FIGURE 33 NOTES (continued)

5. Nightly routine is a schedule of sequential events. The events are:

1. Office record printout (2 hours and 15 minutes before the HOURS and MINUTES)
2. Daily printout of D, W & F schedules.
3. Busy-hour printout from tape of E schedule.
4. Message register printout.
5. Set spare selection status bits.
6. Nightly schedule (includes update of translation file on tape and diagnostics).

6. The value of CHANNO for word 2 (Message Register) is Recent Changeable by the RC:REPT message.

7. This table (Figure 33D) is loaded by Recent Change only, and not by the ODA.

8. Set by the RC program, which subtracts 2 hours and 15 minutes from HOURS and MINUTES.

9. DATA CROSS-REFERENCE AND DESCRIPTION

DATA	INPUT MESSAGE		ESE FORM			DESCRIPTION
	KEYWORD	NUMBER	ITEM	COLUMN		
HAJO to 31	RC:CLS	CLS	-	-	-	The 32 major classes of service all assignable to the class of service registers. 0000 = class not assigned to a register 0001 = class assigned to originating CLS Register 1 0010 = class assigned to originating CLS Register 2 0100 = class assigned to originating CLS Register 3 1000 = class assigned to originating CLS Register 4 1111 = class assigned to terminating CLS register and to originating CLS Register 4
PI1 to 3	RC:INCP	RTY	-	-	-	Route index (Max 3) counts are taken on the route indexes stored in ITR only when accessed thru the 4-digit translator
HRO to 23	RC:REPT	SCHED	-	-	-	Hour of day to control collection of traffic data 01 = on the hour 10 = on the half hour 11 = on the hour & half hour (for weekly schedule only)
DED	RC:QH	DED	3400-1	-	33-34	= 1 - dedicated traffic channel
QW	RC:QH	MAINT	3400-1	-	37-38	= 1 - print Q schedule on maintenance TTY
QT	RC:QH	TRF	3400-1	-	35-36	= 1 - print Q schedule on traffic TTY

(Continued)

FIGURE 33 NOTES (continued)

## 10. DATA DESCRIPTION

DATA	DESCRIPTION
FUNCTION	00 = not done at all 01 = nightly routine function
CHANNO	Channel number data is printed out on
TEU	Terminal equipment number being counted for usage
HOURS	Hour of begin of nightly routine in BCD (See Note 5)
HOURSOFB	Hour of begin of office record in BCD (See Note 5,8)
MINUTES	Minutes of begin of nightly routine in BCD (See Note 5)
MINUTESOFB	Minutes of begin of office record in BCD (See Note 5,8)
NAPE	5 bit code identifying the traffic measurement (See Note 3) 0 = Reserved (ends search) 1 = Cycle Counts 2 = Office Totals 3 = Division of Revenue 4 = Groups 5 = Preroute 6 = Class of Service 7 = A Link 8 = B Link 9 = Terminal usage 10 = Reserved 11 = Reserved 12 = Reserved 13 = Reserved 14 = Quarter hour 15 = Plant 16 = ASA
SCH	Schedule the traffic measurement prints on (See Note 3) 0 = not scheduled 1 = quarter hour 2 = 2 day hour 3 = non-busy hour 4 = daily 5 = weekly 6 = plant



## FIGURE 33 NOTES (continued)

## 10. DATA DESCRIPTION

DATA	DESCRIPTION
LENGTH	Number of registers (words) associated with traffic measurement
TR	Trunk or line indicator 0 = line 1 = trunk or service circuit
GROUP NUMBER	Trunk or service circuit group number being counted for usage.
SENDEL NUMBER	Trunk or service circuit sender number being counted for usage.

FIGURE 34 SCAN LIST (NOTE 1)

CKTSCAN		(INTL INSET)	
3 * n		BYLINK CR OPERATES RATE	0
		OPERATES RATE	1
		SLOW SCAN RATE	2
			6 TC 27
			IN
			SCANNER 0
			(NOTE 2)
			63
			64
			65
			66
			67
			68
			PCMS
			28 TO 31
			IN
			SCANNER 0
			75
			76
			77
			(continued at right)

			78
			79
			80
			ROWS
			28 TO 31
			IN
			SCANNERS
			135
			136
			137
			257

FIGURE 34 (CONTINUED)

## NOTES:

1. This scan list is three scan lists in one: a by-link trunk scan list for by-link trunks; an operator trunk scan list for operator trunks; and a slow scan list for other trunks and service circuits. Scan points in the by-link or operator scan list are scanned every fourth intercept. The slow scan list is scanned every cycle of the base level.
2. Three words per scan row - one bit per word per scan point. Bit = 1 scan points at rates specified.
3.  $n = \text{Row} - 6$  for service circuits and LII trunk (rows 6-27).
4.  $a = 4 \text{ times scanner number} + (\text{row} - 28)$  for trunk circuits (rows 28-31, scanners 0-15).
5. Bylink or operator = Bylink or operator scan points.
6. Operator = Operator scan points.
7. Slow scan = Slow scan points.
8. Scan Rate Table for Trunks and Service Circuits

TRUNK CF SERVICE CRT	WORD 0 BYLINK OR OPERATOR SCAN	WORD 1 OPERATOR SCAN	WORD 2 SLOW SCAN	IC WORD NO SCAN
Service Ckts by Ckt Code: 12, 14 6-12 15, 16, 18, 19			I	X I
Trunk Ckts by Group data:				
BYLK	I			
LTD			I	
IDS = 1	X	I	I	
= 2	X	I		
= 3			I	
If none of the above conditions match			I	

## FIGURE 35A BY-LINK/OFFRATCH T60NK SCAN

[illegible]

```
LOG_SCAN          (B11 ENTH)
```

---

|||||  
|||||

LOGSCAN  
3 | | | 0

NETWERK 42780 (PII ENTRY)

-----

|||||NEW  
|||||0

RETURN 42701 (ALL ENTRY)

-----

|||||NETS  
|||||0

## DISTRIBUTION TRIPLET ADDRESS

TRIP												PPDI												ED											
10	9	8	7	6	5	4	3	2	1	0	9	8	7	6	5	4	3	2	1	0	9	8	7	6	5	4	3	2	1	0					

(continued)

(See NOTES following Figure 35E)

FIGURE 35B EQUIPPED PERIPHERAL DECODER (continued)

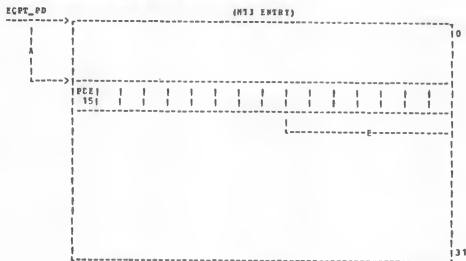


FIGURE 35F FRAMES EQUIPPED MASK - CALL PROCESSING

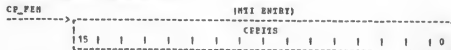


FIGURE 35G FRAMES EQUIPPED MASK - MAINTENANCE

